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ABSTRACT

The 1966 meeting of the Western Regional Conference on Testing Problems dealt with accelerated educational change. The following speeches were presented: (1) "Access to Higher Education: Implications for Future Planning" by Richard Pearson; (2) "The Differentiated Youth: A Challenge to Traditional Institutions" by Joseph D. Lohman; (3) "Teaching and Testing the Disadvantaged" by William Johntz; (4) "Teaching the Bill of Rights in the High School" by Murray L. Schwartz; and (5) "A Retirement Plan for Working Assumptions" by John Dobbin. (KM)

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WESTERN REGIONAL CONFERENCE ON TESTING PROBLEMS

PROCEEDINGS

1966

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EDUCATIONAL TESTING SERVICE

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The Fifteenth Annual

Western Regional Conference on

Testing Problems

Accelerated Educational Change

May 6, 1966 · Hilton Inn

San Francisco International Airport

Joseph Axelrod, *Chairman*

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The Fifteenth Annual Western Regional Conference on Testing Problems

The fifteenth annual meeting of the Western Regional Conference on Testing Problems was convened at 9:30 a.m., May 6, 1966 at the Hilton Inn, San Francisco International Airport by Mr. Richard S. Levine, Director of the Western Office of Educational Testing Service.

MR. LEVINE: I would like to welcome you to the fifteenth Western Regional Conference on Testing Problems. We are pleased to have such a good turnout. I apologize for the rather formal arrangement of the room. We hope that we can maintain the tradition of interchange between speakers and audience. When you do get up to speak, please identify yourselves so that the stenotypist can get your name.

The turnout, I think, confirms our own feeling about having a very interesting and exciting program today. The person principally responsible for putting the program together is as usual, Bob Lambert; Mary Owen made all the arrangements, and I think they have gone very smoothly.

My main function is to introduce the Chairman. Last night I read Joe Axelrod's credentials, and I decided I was a failure. I won't try to tell you about all the things that Joe has done. He is presently Associate Dean for Academic Planning and Professor of World Literature at San Francisco State College. Since he got his Ph.D. in Romance Languages from the University of Chicago in 1945, he has been involved in a wide variety of educational activities.

I think those that are of most interest to the group today are concerned with the evaluation of on-going education. To try to characterize some of Joe's work, it's been evaluation—a kind of brave evaluation if you like—Joe has faced terribly complex educational problems and has made some effort to evaluate and report on them.

Just to document this, in 1950 he was principally responsible for an evaluation of the general education program at San Francisco State. He brought to this job experience in evaluation at Chicago, under Tyler and Bloom, where he was Senior Examiner in Humani-

ties. More recently he has been involved in a national evaluation of foreign language teacher preparation, which will be published shortly.

Now, you can see that these are not laboratory evaluations. They are complex problems that Joe faced bravely and with a large measure of creativity.

I won't go on with this. We should be getting on with the program. Joe's general experience in evaluation certainly qualified him to be chairman of a program concerned with accelerated educational change. This is particularly true since our speakers will focus on how one knows what we are accelerating toward. Joe.

GENERAL CHAIRMAN AXELROD: Thank you very much. I'm not a good chairman, really because I am not a good raconteur. I can't tell stories. I'm a serious person and also an informal person; and it seems to me a chairman ought to be the opposite of all of those. So, I plan just to function by introducing the speakers to you and playing whatever role I can to facilitate communication between you and the speakers during the discussion periods.

Let me however, say a word about the theme of the conference today. When I received a copy of the letter of invitation that Dick Levine wrote to all of you I was amazed at how daring the plan was. The letter said that the theme of the conference is *Accelerated Educational Change* and then he wrote, "This broad umbrella of the semantic ambiguity will cover a stimulating collection of speeches treating many aspects of the recent rediscovery of the educational needs and rights of minorities." And then he went on to say that "escalating changes and technologies, dwindling resources of employment for unskilled labor, and the need of millions of people to readjust to urban living have thrust mounting pressures on American education."

Then his next point was that it is quite likely that at this conference some of our treasured intellectual household gods will be broken. Then he refers to our speakers as "our corps of god wreckers," but assures us that they are responsible men who will wreck the old but will have some constructive suggestions to make.

Let me now introduce the first of these "god wreckers," Mr. Richard Pearson.

■ Mr. Pearson was elected President of the College Entrance Examination Board in February of 1964, and from 1956 until that time, he served as Executive Vice-President of the Board. He received his BS degree in Applied Economic Science from Yale University in 1942, did graduate work in psychology at Yale, and at the University of Southern California, and has been a consultant to universities and foundations here in the United States and Canada and in the United Kingdom. He has written a number of articles in the field of college admissions.

You will be interested to know that Mr. Pearson was President of the Princeton Township Board of Education from 1962 through 1965 and that he is a member of the Board of Directors of the National Scholarship Service and Fund for Negro Students and a trustee of the newly established Mercer County Community College. And I would like to add, too, that in 1964 Mr. Pearson received an honorary degree from the University of Puget Sound. It gives me great pleasure to present Richard Pearson to you.

Access to Higher Education: Implications for Future Planning

RICHARD PEARSON

This is my third attendance at this *Western Regional Conference on Testing Problems.* If the past is any indication of the future, it will be twenty years before I can hope to return. My first appearance was at the first one fifteen years ago; then I was fortunate enough to be present ten years ago in 1956; the next time is today, 1966. Those of you who are mathematically inclined will note the geometric progression in this experience and the prediction that it will be another twenty years before I have an equal and pleasant opportunity.

I have been working since last November on a statement of some of the premises and assumptions for planning that the College Board ought to consider during the next few years. This has been an attempt to adapt a 66 year old agency to some of the currents of change which are clearly visible to the educational scene. This morning I would like to share with you some of the tortuous thinking which has involved us between November and the present time.

The opportunity spiral in American education that began during the early 19th century has by 1966 produced serious problems of

numbers and quality for the country's colleges and universities. It also has placed great strain on the process of college admissions—the means whereby young people make their way from school to higher institutions. The way these problems are met during the next few years will largely determine how soon the United States will become the first country in history to provide full-time formal education for the great majority through age 21 or 22.

It is possible to gain insight into these problems and their solutions by borrowing a concept from the economists. The one I have in mind comes from studies of the underdeveloped countries and the efforts made to identify those elements that, when invested properly, send a primitive economy into a "take-off period," a period when it can build enough internal momentum to lift the economy to the next advanced state.

Examples of successful "take-off periods" are relatively rare in comparative studies of these several countries. The Western European countries went through such periods once during the Mercantile Era, and once again during the Industrial Revolution. The United States experienced its take-off period during the 19th century and may well be facing another such period during the latter part of the 20th century. Japan joined this small group of countries during the late 19th century; Russia joined just two or so decades later. In Latin America, in India, in Southeast Asia and in Africa, the proper ingredients leading to take-off periods for economic development have yet to be identified and successfully applied.

With respect to educational development in the United States, we have completed two such take-off periods and have already embarked on a third. The first, which led to universal elementary education, was a product of the 19th century. The second, which led to universal secondary education, occurred during the interim of the two world wars. The third, which may lead to universal higher education, occurs only two generations after wide-spread elementary education was a reality in the United States.

In 1900 only about six per cent of the country's seventeen year olds graduated from high school. Today more than seventy per cent graduate. A generation ago, college enrollments were about two million or twenty per cent of the age group. This year, college enrollments have reached five and one half million and constitute over forty per cent of the age group.

The beginning of our current take-off period in American higher

education occurred with the return of the veterans from World War II between 1945 and 1950. Since that time, and particularly during the past ten years, considerable momentum toward universal higher education has been gained. However, there are reasons to doubt this momentum is as yet self-sustaining. We have run into some stubborn barriers that may impede further advance. A consideration of the momentum we have now gained, and a discussion of the barriers that may limit future progress, suggest something of the job facing the American educational system during the next few years.

The appearance of a large number of able students with advanced preparation for college is probably the most important outcome of the various educational innovations of the 1950's. Many of these young people have already made distinguished records in college, have moved on in high proportions to graduate and professional schools, and are now entering the senior professions. These graduate students now number about 200,000 per year, and represent a continuing source of high level talent. Similar talent should be nurtured and expanded if at all possible.

The principal reason that these students have appeared on the college admission scene in such numbers is that a thousand or so of the country's secondary schools responded well to the criticism that was levied at the American high schools in the months following the first Sputnik. These schools have since strengthened their programs by up-dating subject matter, improving their libraries, their laboratories, their teaching materials, strengthening their instructional techniques, relying more heavily on independent study, paying attention to student motivation, and improving the preparation of teachers, both initially and during their term of service.

These various changes have had demonstrable effects on the preparation of able students for college, and they have also had important side effects on the secondary school programs for all students.

Another significant outcome of the past decade is the creation of a variety of educational programs and institutions at the college level. A variety that in some parts of the country begins to correspond to the full range of student ability, interest and preparation in the country's high school graduating class. This variety has resulted in the appearance in the college-bound population of students who a generation ago would not have considered college attendance

Many of these boys and girls rank in the bottom third of their high school graduating classes and score in the bottom one-third on conventional tests of scholastic aptitude. Many of their interests are more practical than academic, yet when given the opportunity to continue their education beyond high school in such fields as medical technology or retail merchandising, they have performed with distinction.

We do not know as much as we should about the motivation which makes it possible for all students to undertake post-secondary education successfully. There is evidence that part of their motivation relates to the availability of facilities near where they live. This relationship has been demonstrated by the community college movement. This movement indicates that the establishment of a college will increase the rate of college attendance in the community well beyond what would have been achieved otherwise. Where these facilities exist, up to eighty per cent of the high school graduates enroll, and many of these complete their work successfully. Thus, there is little doubt the large increase in students entering the variety of college programs is related to the rapidity with which community colleges are being established throughout the country.

In sections of the country where these facilities are lacking, as many as three out of four high school graduates go directly into employment. These drastic differences are not the result of differences in student ability; they are the evidence of great disparity in educational opportunities.

Still another advance of the past decade is that we have been able to devise guidance, admission and financial aid procedures that will support a high degree of geographic mobility of the college-bound population. This geographic mobility has both positive and negative aspects. On the one hand, it has expanded choice and option for qualified students who are able to attend college a county, a state, or a continent away from their homes. On the other hand, some part of this mobility has been necessary because regional facilities for higher education are not always available. In particular, there has been serious imbalance between available facilities and enrollment pressures in the heavily populated megalopolis ranging from Boston to New York and Philadelphia, on down to Washington, D.C. Students graduating from high schools in this region, especially New York City and New Jersey, have had to go west of the Alleghenies or south of the Mason-Dixon Line in order to

gain college admission. The geographic freedom of able students should be maintained in the future in order to maximize their choice and option. Hopefully, geographic mobility necessitated by inadequate facilities in these heavily populated areas of the northeast will be reduced as necessary expansion of the educational facilities occur. These various advances of able students, diversified college programs and geographic mobility permit us to say that both quality and quantity have been reasonably well served during the ten year period of expansion.

The creation of extensive public and private programs of student financial aid have made financial need a less significant factor in college attendance than ever before. The curricular reforms which have been made in the secondary schools contribute significantly to the motivation and direction of competent students. Large scale use of aptitude and achievement tests for guidance and admission has assisted in the identification of student ability and promoted geographic mobility. Most of all, the steady expansion and diversification of facilities has assured that the overall supply and demand equation throughout the country has roughly balanced. It would be tempting to conclude that we have gained enough momentum during this last decade to carry us through a genuine take-off period—one that during the next ten or fifteen years will lead inexorably to wide-spread, if not universal, higher education. Such a conclusion, in my judgment, is too optimistic. It is more likely we will have to recognize and deal with some very stubborn realities affecting access to our higher institutions before the momentum already gained will be self sustaining.

I would like to comment now, if I may, on barriers to future expansion in college opportunities. The structure of American society in urban, suburban and rural groupings, combined with the advances of some of our secondary schools force the important decisions governing college attendance to earlier and earlier ages, that is, by age fourteen or the beginning of high school. This is rapidly becoming the major selection point. Where a boy or girl goes to secondary school has an important bearing on whether and where he goes to college. For example, the probability that a youngster from a farm community, attending a small rural school, will enter a major university is less than for a boy or girl with a suburban background. This is true even when student ability at age twelve or thirteen is the same for the two diverse groups.

A similar generalization can be made about children who grow up in large cities and attend urban schools. Few, if any, of the country's four year colleges and universities are now drawing their students from a cross-section of secondary schools. The great majority draw from the few schools characterized by relatively high per pupil cost, strong programs, and usually suburban locations. This situation is aggravated by some of our largest cities' school systems where tracks leading to post-secondary educational opportunities are too often fixed at the beginning of the high school years, and thereby restrict the individual youngsters' freedom of choice.

There is promise that the recent Federal actions in support of public education will provide correction for those imbalances. At the same time, it will take years before improvements will occur, and it is important that students from rural and urban backgrounds not be separated too early from the college-bound population. For the urban areas, in particular, with their problems of poverty and minority groups, there is need for creation of earlier and more effective programs of instruction and guidance.

In this connection, there is a tendency to overlook the boys and girls in the late elementary and junior high school years, and concentrate on slum children of preschool age. We should not diminish our efforts for the younger children, but it is equally important, in my judgment, not to write off the generation of slum children already in the 6th through the 9th grades. Improved guidance programs in the junior high schools similar to New York City's original Demonstration Guidance Project could go far to make it possible for many of these boys and girls to continue their formal education through high school graduation and beyond. What is needed are broad descriptions of student interests and capabilities that can, with the assistance of a wise and sympathetic counselor, be related to the equally broad spectrum of educational opportunities in the high school and post-secondary institutions. The lesson of the Demonstration Guidance Project, a lesson that has yet to be widely applied, is that what these children need most of all is a clear picture of the possibilities open to them and a reasonable assurance that these possibilities are not beyond their reach.

The able students who succeeded in joining the college-bound population early and who received strong preparation for college during their high school years, are now beginning to run into new barriers upon entering college. The student unrest on many of the

university campuses is, among other things, a symptom of the obsolescence of traditional academic programs in light of the vast changes in the country and in the secondary schools. Duplication of subject matter between the 11th and 12th grade and the first year or two of college is a more serious problem today than it has ever been. Many colleges that receive numerous well-prepared students still cling to the stereotype of the entering freshman who is poorly prepared. These colleges operate on the assumption that, when in doubt, the academic program in college ought to start from scratch. This situation is the result of an imbalance between curricular reform in the schools and the absence of such reform on many college campuses. The secondary schools, both public and private, have succeeded in producing more students today who are capable and well-prepared than there are corresponding openings in our higher institutions. This imbalance is obscured by false issues of status and prestige. Setting these aside, it is the conviction of many experienced secondary school principals and guidance counselors that many of their graduates are over prepared for the college work they are often obliged to take. This is, of course, part of the still larger problem facing the various colleges and universities—the problem of sharpening and balancing their objectives among the functions of teaching, research and public service.

In the lectures at Princeton last fall, Cornell University President, James Perkins, suggested that this balance should be different for the universities than for the liberal arts colleges. Speaking of the universities, he observed, "the fact is that both undergraduate curricular and admissions policies need modification in order to assure the internal coherence and the integrity of the university through a closer coordination of teaching and research functions." The tendency for the universities, the liberal arts colleges, the community colleges and other higher institutions to specialize according to a desired emphasis on teaching, on research or on public service should promote more diversified opportunities for the well prepared student now coming out of our secondary schools.

To me there seem to be several implications for the future in these various developments. One is that we, as yet, have no idea how many able students there are among the country's youth. Some educational planners think in terms of five percent of the age group. In actuality, proficient and successful students during the last decade have come from the top 15 or 25 per cent of the high school gradu-

ates. The educational master plan here in California speaks in terms of the top 12½ per cent, but the safe money may well ride with the community college president who asserted an interest in the top 100 per cent.

Another implication for the qualified student of the future is that his choice of college should rest as much as possible upon his own considered decision. This is a principle that has validity for all students. It is particularly appropriate for the ones we can identify as able because a large part of their purpose and direction is being formed while they are still in secondary school. Student decisions about college attendance would be sounder conclusions if they rested on more factual information about the different opportunities afforded than is now available.

Still another barrier may impede future expansion of college opportunities. It is less visible but may prove to be more difficult to deal with. This is the problem of when and if the impoverished one fourth of the population is somehow provided for in the urban public school system. The recent actions of the Federal Government in education and economic opportunity hold promise for retaining many boys and girls in school who might have previously dropped out before graduation. We don't yet know what changes will be required in these urban public education programs for this to take place but there are growing signs that major innovations in the elementary and secondary schools will be necessary. It seems quite possible that entirely new school organizations will be needed for these children and that this, in turn, will force the invention of entirely new kinds of colleges. We do know there is a growing national commitment to these boys and girls and this commitment may well demand major educational innovations.

Regarding guidance and admission practices, particularly among the minority groups, it is important to emphasize that our present understanding of what these boys and girls can or cannot do is shaky at best and might be dead wrong in a significant number of cases. There are, undoubtedly, latent abilities among many of these children that can be brought into play if our guidance and instruction and their motivation prove effective. Strenuous efforts already are beginning in the elementary school, high school, and in some of the community colleges to design programs that will bring out the abilities of these students. It is too early to tell whether these programs will be successful; however, in view of the magnitude of the

national commitment to the problem, it would be only prudent to allow for the possibility that they will succeed. This means that our future guidance and admission practices and especially our tests, must be mindful of new insights on human development stemming from successful work with these boys and girls.

In conclusion I wish to turn to the question of future initiatives in the public interest. In explaining why the economies of some under-developed countries "take-off" while others do not, the economists are puzzled about how much initiative should come from the public sector and how much from the private sector of the economy. There is agreement among American economists, at least, that a judicious combination of public and private initiative is required. The balance in any particular case is controversial and depends heavily on particular circumstances that may often be unique.

Expansion of educational opportunity beyond the high school in the United States also raises the question of how much public and how much private initiative is required. This is a pressing issue for the privately-supported colleges and universities. We are one of the very few countries that now possess a strong system of private higher education. This is also a pressing issue for the College Entrance Examination Board—a private agency that serves both public and private higher institutions. The day has passed when we can assume that action to serve the self interest of a private agency will, at the same time, automatically meet the public interest. We have learned, both in the economy and in education, that there must be acceptance of broad common objectives and a willingness to work toward these objectives with available resources, both public and private.

Further, we at the College Board assume that it is now a national objective that all boys and girls in the schools of the United States have the right to full-time formal education through at least two years beyond the high school. We believe that the great majority of the country's youth are potentially able to benefit from such a national commitment of public resources. In operational terms on the college admission scene, there are at least five propositions that can be derived from this national goal:

1. All high school graduates of the country should expect to gain admission to a two or a four-year college or university.

2. All graduates of two-year colleges in university parallel programs should expect admission to four-year institutions.
3. Any other individual, of whatever age, should expect opportunities to demonstrate through independent study or other off-campus learning experience that he is qualified for formal study at the college level.
4. A significant proportion of American resources for higher education should be reserved for students from other countries, particularly those whose own university resources are limited.
5. Along with all the other propositions, it is urgent that we nurture the talent we now have among the youth of the country, and seek to expand the pool of talent to the greatest extent possible.

These propositions give us, at the College Board, the responsibility of undertaking a major review and revision of many current guidance, admission, and financial aid practices. We may need to change or discard current activities whose justification lies in an era of educational scarcity. We will need to devise new activities, including new tests, whose rational assumes an abundance of opportunity for post-secondary education. The basic choice facing us in admission practices of the future is between an authoritarian system that rests heavily on decisions by colleges and central agencies, and a permissive system that rests heavily on choice and decision by the individual student. Chances are we could not make an authoritarian system work in the United States even if we wanted to because of the diversity of opportunity and the variety of young people of this country. No test, no computer, no central agency can provide the wisdom and the insight necessary to support an authoritarian system of college admission in the United States. Instead, our public initiative should be directed toward giving boys and girls the information and encouragement needed to make the truly important decisions about their futures.

■ CHAIRMAN AXELROD: I want now to introduce our second speaker, Joseph Lohman who is the Dean of the School of Criminology at the University of California, Berkeley. Mr. Lohman's degrees are from the University of Denver and from the University of Wisconsin.

Every time I introduce a speaker and give his degrees I have to think twice because I once heard a slip of the tongue—I *think* it was a slip of the tongue—when someone who had lots of degrees referred to his academic "debris." And it made such good sense to me that I have had to think twice ever since when I speak of degrees.

Mr. Lohman's degrees are from the University of Denver and the University of Wisconsin. He was a faculty member at the University of Chicago. Indeed, before this meeting started we discovered we had a common past on that fascinating campus, as I was also a faculty member there at the same time. He also taught as a regular member of the faculty at the University of Wisconsin and as a visiting professor at Washington University, the Louisville and Denver Universities and the American University at Washington, D.C.

Let me try to characterize Mr. Lohman's career, because there is too much to give in detail. I want *him* to have some time to speak. His academic work has centered in the social sciences and he has dealt with problems of planning, housing, economics, public administration, public finance, crime and community problems. Those are the foci of his academic interest, but in addition to this he has served in a vast array of positions outside the academic world. He's been a public official in local and state governments in a whole range of capacities. Let me name just two: Sheriff of Cook County in Illinois and Treasurer of the State of Illinois. He has been a member of a wide variety of Federal Commissions including service as Chairman of the National Capitol Planning Commission and is currently a member of the President's Committee on Juvenile Delinquency and Youth Crime. He has written a great deal about these subjects. He has not only used the medium for communication that demands people be able to read, but because there are other means of communication that may be in some ways more effective, he's also created and conducted several television series on these subjects which have appeared on educational TV stations all over the country. So I would like, without further comments to present Joseph Lohman. He will speak on the subject, "The Differentiated Youth: A Challenge to Traditional Institutions."

The Differentiated Youth: A Challenge to Traditional Institutions

JOSEPH D. LOHMAN

I don't know whether your introduction is going to prove a disability or an opportunity. I noted the interest with which you learned that I had been a county sheriff and a county treasurer. Holding these offices in Cook County seemed to move you deeply. I must confess that that which moves you to, shall I say, an attitude of superiority in reference to the reputation of Cook County is not entirely without foundation. And I can only say that the boldness with which I venture forth here this morning has a precedent, that is if you are wondering what a criminologist is going to say in such a circle as yours.

I want to preface my remarks by noting that the forward-looking and imaginative perspective in which higher education was viewed by Mr. Pearson really leaves me little to scold you about. It gives me little opportunity to come from the outside and suggest that I "bring you alive" with some insights from the vantage point of those who deal more specifically and directly with the marginal elements of our society. However, it is the marginal elements and the degree to which they have become a chronic condition of the metropolitan centers which has given occasion to these remarks and to a consideration of some of the methods and procedures we have traditionally employed.

However, speaking quite informally and begging your indulgence for what may seem to be trite and repetitive, but with a view to developing a personal dimension, I think the thrust of Mr. Pearson's remarks is that there is in each of us a problem of self-examination as persons and as members of institutions which is not automatically satisfied by merely reciting, in formal terms, the problems that confront us. I perhaps can take my point of departure from a passage in the progress report of the "Panel of Educational Research and Development of the United States Commissioner of Education." This report on the so-called deprived and segregated in American Society was issued in March of 1964. You must keep in mind that this report has the imprint of the Office of Education, and in many respects,

therefore, has been spoken with the authority of the highest placed public official in education in the United States.

> By all known criteria, the majority of urban and rural slum schools are failures. In neighborhood after neighborhood across the country more than half of each age group fails to complete high school, and five percent or fewer go on to some form of higher education. In many schools, the average measured IQ is under 85 and it drops steadily as the children grow older. Adolescents depart from these schools ill-prepared to lead a satisfying, useful life or to participate successfully in the community.

And I might add parenthetically, they are ill prepared and hence denied access to higher education.

> The blame for this condition attaches to many places besides the schools; indeed, the schools are among the few institutions that seriously attempt to remedy it. The schools have struggled by themselves and with the help of foundations to master the conditions of the "inner city," and reverse the decline of schools in declining neighborhoods. . . . But the problem in its full extent remains. Passive and unhappy, many children sit in school and learn little. Much of what the school offers appears meaningless to them.

While this is not new to you, its significance lies far beyond that of the slum school because it indicates that marginality—with reference to our society in general and to education in particular—takes on new and unprecedented dimensions in contemporary American society; this, notwithstanding the report of the increasing numbers in higher education. The increasing numbers in higher education are paralleled by the paradox of an expansion of the disabled or disabling aspects of the society vis-à-vis the educational problems in large sections of the American community. We are confronted with the necessity of changing many of our accepted and traditional attitudes toward the public that we are engaging and to whom we want to relate, if there is to be afforded even the smallest opportunity for an effective relationship with them; that is, the smallest opportunity for a modification of their condition and, specifically, their attitude. For what confronts us in our classrooms and communities is the projection of current problems of community life under which far too many of us who are products of an earlier time and a different place, are too ready to bring our earlier instruction and education on the present scene and to insist that the world meet

us today as it did on those earlier terms. Today we need a redefinition of the problems of marginal youngsters and the condition of underprivilege.

It is indeed a new statement of the case to speak of native American children who are culturally different, and it represents a change from the traditional conception of the underprivileged child. This is the current condition under which we are addressing what are newly-defined and newly-emergent problems. These problems are of such proportion and such dimensions as to require a definition in collective terms, rather than in terms of the individual. We cannot provide the services necessary to deal with these individuals within the established and traditional structures. We are all aware that the disadvantaged, so-called alienated youth, represent a special problem within our student population; and of course, it is gratifying to witness the increasing attention that is being given to this problem in educational circles. However, in my opinion the problem is not external, not imposed upon us from the outside; rather it is in large measure derived from the structure of our institutional relationship to the world outside. At this point, there are very important implications in the changing social scene, not only in the development of students who are special problems for us, but in the development of a problematical pose on the part of institutions which themselves have not reflected in some direct measure the influence of this change. More often than we realize our present structure and organizations do not permit us to cope with the problems that confront us in terms which are appropriate to them. Our professional obligations, the institutions of which we are a part, our traditions, our routines, our procedures have molded and shaped us and they are the basis of our engagement to a large extent. They have often forced us to ignore the need for a new way of perception no matter how sensitive individual teachers and administrators may be to the problems, these historical entrapments and incrustations prevent an effective engagement. This is especially clear to me as a criminologist. I have perhaps had more dramatic experiences with this kind of problem than you as educators have had occasion to have. Criminologists deal with marginal youth. We well know that the attitude of the community is traditional. Even in engaging youth and going forward in a new relationship with them, the community demands penitence and contrition of them. It demands that marginal youth identify with what is considered

proper. One writer has coined a phrase, adopting the notion of "instant coffee" or "instant tea" to the idea of "instant reform." We too often insist as a condition of improving them that they must be "instantly reformed." Prisons, reformatories, and training schools are so structured as to establish this as a condition of engagement. Rules and regulations are a prior condition within which the engagement is to exist and go forward. They are considered to be a necessary condition of contact—but it frequently follows that there is no contact and no effective communication. The youngsters whom we counsel and instruct, and to whom we want to relate, use the same language that we employ; but we have learned bitterly on the Berkeley campus, and some of you on other campuses as well, that these students are not sure, as we make our gesture to them, that we are not attempting really to impose upon them; and we in turn are not certain what their responses to us mean.

I am reminded of a story that is told of a lion hunter whose gun jammed as he saw a lion coming at him. When he opened his eyes, after he had fallen to his knees and began to pray, he saw the lion also kneeling in prayer and in obvious relief lifted his hands to heaven and shouted, "Hallelujah, praise be to the All-Powerful Ever-Living God. Since we are both praying we apparently both believe in the same God. We can talk this thing over." "Yes," the lion replied, "I don't know what you are praying about, but *I* am saying grace." We must realize that our young people do not know whether we are praying for their deliverance or whether we have designs upon them.

In the behavioral sciences there has been recent emphasis upon the importance of informal structures of latent processes; and we have had occasion to reflect upon the contrasting formal terms of our instruction and its comparative relationship to what actually goes on. The point is, the evaluation of our experience has led us to see that the institutions which we take for granted too often have ambivalent and quite antithetical effects to a substantial segment of the population. Agencies and institutions which are presumed to be helping, sometimes—and I underline this point—generate the very tendencies which they are designed to remedy.

I am reminded of a book that came out some 35 years ago in New York, written by Caroline Ware at Columbia University, entitled *Greenwich Village*.[1] In the volume there is a rather interesting in-

[1] *Greenwich Village, 1920–30,* Caroline F. Ware, Houghton Mifflin Co., Boston, 1935.

sight that came from one of the workers in the form of an essay which she found difficult to incorporate in the main text of the book so she put it in as an appendage. The title of that essay was, "The Public Schools' Contribution to the Maladaptation of the Italian Boy."[2] They were not writing of a bad school; nor of an inadequately staffed school; nor were they commenting about inadequate resources or distortions in the educational process. They were noting the sense in which the relationship between the school and the student produced opposite effects to what were intended. The essay pointed up the fact that the school contributed to, perpetuated and indeed increased the very things that it was attempting to redress.

There is an increasing emphasis and concern in the numbers and complexity of mass society. Large numbers, large scale social structures and organizations are a chronic condition of our life. I would like to dwell on these for a few minutes. First, our society has generated a phenomenon that contrasts sharply with the previous history of our country. The emergence of sub-cultures in the society has been complicated by the creation of immense bureaucratic structures which are a new and important variable in our relationship with the population. I would like to avoid, however, the usual platitudinous remarks about the broad social trends and contexts in which our problems arrived. I shall make some passing references to what are indeed quite revolutionary changes in the social order in the context of which we can understand the emergence of widespread expressions of deviance in general, and the more specific problems of educational rejection, which I see as a system of mutual rejection.

I would like to emphasize the need to recognize that these revolutionary developments of our time have important implications, not only in the changing condition of the community but for the institutions themselves. We take seriously the need for institutional change to meet the needs of the changing social scene. There is much "to-do" these days about the alienation and estrangement of both the youth and the elderly. We cast their dilemma in such notions as "anomie," "detachment from the social order"; lack of identity with it; their lack of personal identity as an individual counter-part of their collective disassociation from the social order. These notions or words represent a framework or a context in which we see man's behavior in terms of individuals at odds with the conforming patterns

[2] *Ibid*, Appendix E, pp. 455–61.

of society, indeed at odds with the institutions that represent those confirmed patterns of society.

I should like to dwell for a moment or two on the notions of estrangement and alienation from the standpoint of social institutions. I think it might properly be suggested that even as we speak of persons as being estranged and alienated from the conventions and norms of society and from the institutions, we are indeed confronted in the current crisis by a crisis of the institutions themselves. For it can be seen that institutions have not kept abreast of the changing social scene; they do not reflect these trends in themselves. So there is indeed a crisis in education. There is a crisis in welfare. There is a crisis in law enforcement.

I could wish that some police officers had occasion to attend to Mr. Pearson's remark about the ill-fated prospects of an authoritarian resolution of our difficulties in American society. They do not see the dangers inherent in such a solution. They are indeed moving too easily in the direction of merely, by ordering and forbidding techniques, seeking the kind of a social order that we desire. And I am as much disturbed by that, perhaps more, than you who are looking at criminal justice from the outside. It is the crisis and dilemma of the several helping services, including the educational services which need to be made more explicit. It is these crises in institutions such as the school, welfare, and criminal justice which constitute the challenge of the day. One might appropriately refer to the traditional services as alienated and estranged from the people rather than the reverse.

To put this another way, along with the revolt of the Negro and the revolt of the youth, there is a whole series of more specific revolts which are being expressed in petitions for new legislation as well as a new philosophy of orientation. There is, if you please, a revolt of the "clients" of our society. And this may very well be representative of what, at long-last, the poverty program is awakening to: a quest of the poor for a role in the decisions which are affecting them; a quest of the young for a role in the decisions which are affecting them; and a quest on the part of minority groups for a role in the decisions which are affecting them. We patronize them more often than we know. We deal with them rather than work with and through them.

Now you may suggest that we have honored this viewpoint, but it is not the way in which the agencies and the institutions of our

society in recent years have organized and made their services available. The professional services have been made available on a worker-client relationship, and we are only now modifying our traditional practices in the light of protest and shall I say the "talking-back" of these clients. There is a revolt of the clients. The revolt is manifest in the attitude they take toward the school, toward welfare, toward the police and toward correctional agencies. And there is, of course, the revolt of the aged. The newly-emergent center of power of the "senior citizenry," which has made Medicare possible, is a reality. The manner in which private agencies and institutions of local communities have developed new institutional methods to deal with this sub-group indicates that something quite different from the past has emerged. There is a recognizable voice and revolt in the collective action of these elements.

The central and, for the most part, incompletely explored phenomena of the current American scene are the reactions of these sub-cultures. For example, the formal structure and organization of our educational institutions does not, at this juncture, give sufficient recognition to the existence of an adolescent social system of young people. It does not deal with them as a social system. It deals with individuals who are marked by it and, for the most part, in this sense individuals who are marked down and denigrated. Most thoughtful students of the problems of young people are quick to assess their difficulties in the light of changing social and economic conditions. The socio-economic scene may complicate and even aggravate the central concern of every self-sustaining individual, namely, the realization of personal satisfaction from finding the kind of work that can make a life. As Paul Goodman has stated the issue, "It's hard to grow up when there isn't enough man's work." But sweat and toil alone are not the whole of the problem. Goodman further indicates, "To produce necessary food and shelter is man's work. During most of our economy, most men have done this grudging work, secure that it was justified and worthy of a man to do it, though often feeling that the social conditions under which they did it were not worthy of a man; thinking, it's better to die than to live so hard — but they worked on."

Security is always first; but in normal conditions a large part of security comes from knowing your contribution is useful and the rest from knowing it's uniquely yours: they need you.

Earlier generations in the United States have needed youth be-

cause the very life of the family, bread on the table or coal in the kitchen range depended upon their contribution. Such was the case even for the slum child, scavenging along the railroad tracks for coal. It wasn't difficult, however irksome the task, to see it as a meaningful task, an important function. Youth saw itself as wanted, as being needed. Chores as we knew them were something more than mere irksome invasions of childhood freedom, they were meaningful additions to the family, indeed the security of the family itself often depended upon the contribution of its youthful members.

A couple of summers ago I was privileged to take a trip through Yugoslavia with a team from the University of California. Their youth is early petitioned, implored and nurtured, because, to use their phrase, the elder carriers of the revolution see that youth is needed to carry on the revolution. They know that only youth can take up and carry on the task of shaping and forming their hopes for a new and better society, and similarly, in the newly emergent nations of Africa and Asia only youth who are free of tradition and the ancient past can move them from tribal confusion and anarchy toward a rational economic interdependence. In such places and under such conditions where the adults and the young people of the society see the need for each other, there is less tension and less estrangement of the generations. Indeed the generations are much in need of each other, not alone for economic survival of the society but even more in the maintenance of its very integrity as a moral order. Without such mutual recognition there cannot be that sense of being needed, that corresponding commitment by the younger generation which alone, through ensuring the self-respect of youth make both the young and the old secure and the future of the society certain.

But in these times, in these United States, we no longer have, for the most part, the same needs of our children. For example, we no longer need them to support us in old-age, as was the case before the advent of the Social Security System. Indeed, on the economic level they are in the way. The adult world finds little need for youth. To a large extent, youth has been transformed from an economic asset to his parents to their greatest economic liability. The fact that the child has become an income tax deduction has, by no means, made up the difference. The prolongation of childhood, and the Child Labor Laws, the cost of bringing up and educating a child for 15 or 20 years or more of his life without any return, mean that

from an economic point of view the mutual need of the generations has passed with the times. In short, the economic roles, the obligations and the responsibilities, the rewards, even the power relations between the young and the old are now only shadows of the recent past.

In some respects, the relationships have been completely reversed, a factor which threatens to take from youth its sense of importance and usefulness and its sense of being needed. At the same time vast numbers of the adult society are being threatened by the automated machine and changing technology. Today many able-bodied persons in the prime of their lives are facing an uncertain future and the spectre of chronic indigence. Perhaps it would be well to focus on this problem as evidence of the revolutionary movement of our time in establishing the terms and conditions of new collective entities which our traditional institutions are for the most part not aware of, or certainly not structured to engage. These changes have established the terms and conditions of new sub-cultural developments of our society and of the emergence of specific social systems of young people in which the spirit of rebellion is so currently manifest. We must remember that the extreme instance of our problem was well indicated at Watts in Los Angeles. The rioting was concentrated in a well defined collection of persons; not the whole of the Negro community, not a community which was a poor community as such alone, not again in terms of persons of a particular age group. The violence as it was expressed there, and the violence which could not be contained was concentrated in persons who were thrice-defined in their sub-cultural identity. They were poor, and members of the sub-culture of the poor; they were young, and as such they were members of the sub-culture of youth, party to the adolescent society of young people outside the structured society; and they were Negro, and in that sense members of the sub-culture of minority group status. And in each of these instances, their condition of sub-cultural identity represented, in effect, a way in which they had occasion to deal with a particular form of deprivation, which in our society we are visiting upon young as young, upon poor as poor and upon minority status individuals as minority status individuals. In each of these instances there has emerged a new center of power, a manifestation of the problem-solving disposition of human beings generally, to work collectively in engaging and overcoming the deprivation which they are collectively experiencing.

There are those who have coined the phrase "the culturally deprived, the culturally disadvantaged." I take some exception to that formulation because it seems to me it puts us at odds with the essential quality of that which is confronting us. The term infers a lack of culture which makes them incapable of accommodating to that which we have in mind. In one respect, this certainly is true, but it ignores a more important consideration that should be our principal concern; namely, that there is a positive side to their behavior; that they do indeed possess culture. This is not best suggested by the term, "the culturally deprived" but rather that there is a culture which arises out of their deprivation, the *culture of the deprived.* We have reason to see the sense in which our youngsters have been excluded and are required to play a new and unprecedented role reacting to their deprivation as young people. Our racial groups have also been excluded—and have had occasion to develop a culture in the desperate attempt to make life livable under the conditions of racial discrimination and deprivation. If indeed, we can recognize that imagination, ingenuity, and human talent can take different forms in the solution of the immediate problems that confront us, then we have reason to ask ourselves whether the new situations into which we would pass them take proper notice of these capacities and these abilities and these formulations as a condition of their engagement for whatever purposes we may have in mind.

If there ever was a challenge to the testers and the counselors, it is to accept how we have insensitively ignored the positive values in these subgroups which are not identified by the usual instruments commonly employed to assess potential. We have for the most part, rejected them by not identifying or understanding the problem-solving devices which they have formulated. As a matter of fact, that which makes for success in the slum, and for survival itself, may be depreciated as a condition of education or as a condition of welfare; and, correspondingly, such individuals, given the perplexing ambivalence of acting in ways to meet the requirements of education which have little, if any, survival value in the street, are automatically rejected and returned to the streets in their communities. Small wonder the Negroes have had to say, "What purpose in education? What purpose all of this if I cannot realize a new place, a new prospect for myself in society?" It is true that only a small percentage of young people are participating overtly in acting

out the current spirit of rebellion but many are more vulnerable and that general spirit of rebellion may well extend to greater numbers. The result may be a profound modification of the traditional patterns of power and authority. This is already indicated by the increasing incidence of attacks by young people on the police and other symbols of power and authority.

Everyone is familiar today with the gloomy future of great sections of the youthful community which are confronted with the likelihood of a future without jobs. Automation has cut away the whole bottom segment of jobs for an enormous section of the youth of the community. This problem is further aggravated by the birthrate. Some 17 years ago it definitely went upward, hence, present day youth are the products of that increased birthrate knocking at doors which are closed to them. Society speaks of the problem as though school drop-outs were a new kind of creature to plague us. The point is that we have not learned how to transform the majority of the youths into adults who perform mentally rather than physically for higher status. And because we have not, we cannot give them a sense of direction which all human beings require.

There are several quite distinct and transforming features in society that have had a very special impact upon us and that must serve as our point of departure. I would like to mention these in passing. We are all now acquainted, through the daily press and cocktail conversation, with what the population explosion will be, and with the possibility of "standing room only" at the beginning of the year 2000. The year 2000 seems to be a comfortable distance in the future. However the population explosion is significant already in quite another way; not so much in terms of numbers, but in the sense of its uneven manifestation. Long before the numbers had moved in upon us, they had set in motion a fact of human relations which is quite different and important. Different age and ethnic cultural groups exhibit different proportions of the various groups in the total social structure, and hence new conditions of interaction of these various groups. There is an uneven impact upon society which has a very special significance for us.

The point is that America is paradoxically getting, at the same time, older and younger. As a result of the disproportionate increase in the birthrate; the refinement in our medical technology; the movement from rural to urban areas; and the inability of the city to deal with these problems, urban living reflects the disability in terms of

the disadvantaged and the marginal groups. All this is linked in life so that there is very rapid acceleration of the increase in population in the upper-age groups and in the years of childhood. A society which has more mouths than it has hands is essentially the spectacle of the population explosion.

Now, of course, the question can be raised, "Can we really have more mouths than we have hands?" It is immediately wondered at, as being some kind of a miracle and it really is. A miracle of technology has permitted the increase in manpower productivity so that the very few produce the necessaries for the many. This is the bane of our existence and also in a sense, our promise, for producers turn prematurely into mere consumers. The producers in a sense are in an eclipse in our society. So we have through this explosion an entirely new problem and our failure to engage it has given us, since World War I, this phenomenon of the deprived sub-cultures in American society. Let me say a word or two about that.

Some months ago, I attended a conference at MIT under the auspices of the Office of the Scientific Advisor to the President. The title of the conference was, "The Difficult Thirty Per Cent in American Education." The conference was facing the fact that the time had arrived when it had to be said of the American public school, from elementary and secondary to the university, that a third of the student population in the urban centers had such recurrent, such chronic problems in the school as to be major problems for the educational system. One in three of the student population has developed the adaptive solution of playing the "system game" and in a sense overcoming these problems by leaving the schools. In fact, I might say from the school's position we have developed a formula for dealing with a considerable number of them. We move them along and then graduate our problems; so when they leave school, they simply leave it as they were rather than as someone we have transformed. In some form or other, it is suggested to these students that they really don't belong in school, although a vast majority of students in the past have been served by the schools. We now have the spectacle of a society with a massive impersonal quality, detaching large numbers, en masse, with the only identity afforded them through local sub-cultural problem-solving experiences. There is, in this sense, an eclipse of the formal controls of society because of the prior claims these sub-cultures have made upon individuals. There is a natural antagonism between the children of the slums,

the racial groups and the police, as well as the general community. Today the "real" controls are in the area of the local, the primary, the face-to-face experience of these groups which are at odds with the general society.

We may very well ask "Why is it students have no sense of shame and guilt as young persons formerly exhibited?" It appears to many that they have become cold, calculating, inhuman agents without the essential characteristics of the youth which they remember. But there is a sense of shame and guilt. Shame reinforces locally defined nonconforming behavior. In the current cultural communities of America, a variety of sub-cultures have made shame and guilt problematical. They reflect the local sub-cultures to which the young people relate. Hence, it produces non-conformity rather than conformity to the established norms of the general society, and correspondingly it emphasizes skills which have local value.

The power of the sub-culture to effect this reversal of values and norms is not fully appreciated. We are still asking ourselves why it is that formal ordering and forbidding techniques are not able to produce conformity. If the policeman's lot in the past years has been, as Gilbert and Sullivan said, "An unhappy one," it is more likely to continue to be an even more unhappier one in the future. We are continuing to subscribe to the notion that we can police an orderly community without having it formally supported by these informal systems of control.

Members of our staff have recently been making a study of the social systems of young people in the Los Angeles area. We have witnessed the fact that the educational institutions of the community are often incapable of effectively engaging their students in competition with these local social systems. These sub-systems must be given serious attention. Our observations indicate that we must take note of the experiences and influences which their peer groups have established as prior. The sub-culture of youth represents positive features of adjustment as well as negative features. These relationships have a substantive content other than that which we have identified and hence we have frequently attempted to cope with them on irrelevant terms. Under present circumstances, they are a center of influence and power with reference to the youngster who reverts to them as he drops out of school. The undisciplined youngster, the difficult classroom situation, all of these must be understood in a realistic context.

We could spend much time in exploring their real world; their rather strange, exciting and mysterious world which we know only, for the most part, from the standpoint of the vernacular of the youngsters, the externalities, the superficial features; the tight skirts, the big hair-do's, the cliques, the terms they employ in naming one another. These are all superficial evidences of an inner-system of value and of norms, which is the important thing which we have not yet probed. There exists, in the adolescent world, a substantive content of experience which is a new center of power influencing the nature of adolescent behavior.

To project this in a more accurate way, let me refer to what is happening in certain minority groups. The general context of significant change between 1950 and 1960 had brought on a great transformation of the concentration of population in the major cities of the United States. That is the problem of nearly all of us who live in urban communities. The twelve largest cities of the United States gained nearly two million white residents against somewhat in excess of two million Negro residents in that short ten-year period. When this transformation took place, it reflected a disproportion of change, as well, in the youth population within those cities. The city of Washington has a non-white population of well over 65% but the schools enroll well over 75% non-white. Chicago reported that this year—for the first time—over 51% of the students in the school came from the Negro world even though only about 26% of the total population of that city is Negro. The city of Philadelphia has reported now for two years well over 50% of its population as non-white, whereas only 33% of the population of that city is non-white. The public school is confronted with a population, half of which comes out of a sub-culture with characteristics which must be reckoned with as a condition of the engagement of that population. And the way in which we see these people, in terms of traditional methods, their view of our view, is *our* problem rather than the nature of the children themselves.

And what do I mean by that kind of language reference? *Our view* of *our view* is the means we employ for knowing them. In 1951, one out of every ten children in the twelve largest cities of the United States was identified as culturally disadvantaged by the public schools. Today the term is applied to more than one in three. These children have problems as a result of their background which make it impossible to move them along the school system at the same pace

as the great majority of youngsters. By 1960 this figure had become one in three. As a matter of fact, projecting the trends, it now appears—without major changes by 1980, the ratio will be one in two in these major metropolitan centers.

The textbooks' measure of the culturally disadvantaged, culturally deprived, are in this sense, misleading and I think, have been too quickly taken up. The youth are culturally disadvantaged in the perspective of the school culture and from the point of view of middle class society. Nevertheless, these young people have a culture, and the culture is indicated by the nature of the subcultural environment and its contents. If we recognize this we would discover, as Mr. Pearson has already indicated, that even in terms of those that are disadvantaged, we would find among them, without necessarily going back to the primary grades, a larger number who could be recruited for higher education than is currently the case. And I think that the experiences we have already had at Harvard, at Berkeley, in the Northeast and in Massachusetts haven't indicated that we have passed over many because we have tested them out of contention. Indeed a re-examination of that feature permitted us to engage them to find that they could move along with all the others.

So what are referred to as culturally disadvantaged, culturally deprived are the groups which do not exhibit the culture of the predominant society which is perhaps symbolized best by the influence and power that symbolizes the middle-class in our society. The sub-cultures represent the ways in which people seek to resolve their problems, the problems that they have experienced in meeting life situations. These groups have made a life under conditions of self-denial that stem from the social transformations to which I have referred. The experience of deprivation has produced adaptive behaviors and cultures on the part of these individuals. The adaptive culture of these individuals is something more than the shortcomings of individuals who have not been exposed to the middle-class culture content.

Perhaps I can conclude here by making a point or two about the formation of the culture of these groups, because I think there is too often the notion that the press, the radio and television have, in a sense, been of such a quality as to lift or bring down these people. To denigrate them is to miss the point. Culture is not acquired in this simple mechanical way. It is primarily determined,

not by the formal communication of words and symbols but by relationships among people. Culture is forged out of the interaction of groups with each other over long periods of time.

In reference to the groups we are discussing, there is the culture which arises out of the mutual dilemma of deprivation, the cultural deprivation of young people today. They are not wanted; they are not needed. They must find some meaning for life; some acceptance for themselves; some sense of self-achievement which is denied them in the circumstance of the adult community. The Negro needs a substitute for low self-esteem: namely, higher self-esteem. If we are wise we can gain insight into what is happening to youth in this regard. Youth generally is related to the adult community in such ways as to provide a low self-esteem, rather than to see themselves as important and significant. Therefore, they must compensate by developing attitudes, norms, and values which do give them a sense of worth and importance. And more frequently than is good for the society, this turns out to be a condition of defense, a condition of rebellion rather than a condition of identity with the adult culture. So in increasing numbers the deprived or disadvantaged young people of our time can see reflecting the main culture of their society as they militate against the welfare and the schools. They are indirectly demonstrating a cultural self-image which is in fact a contra-culture, representing rebellion and opposition to the items which identify with the sub-cultures from which they stem. On picket lines in San Francisco, or in gang groups in alleys and byways of one slum, this is seen as a reaction to and a rejection of the larger community.

The sub-culture of the adolescent increasingly runs counter to the culture of the school. In these sub-cultures, there is less interest in knowledge for its own sake than is represented in the adult community and in the school. The pragmatic anti-intellectualism which is pervading the lives of the young people today is most surely expressed in the dilemma of the young Negro, the young Mexican-American, the young Puerto Rican—"Why go to school to learn interests and activities that will not have any pay-off in the places in which we will one day find ourselves?" The fact that this attitude is expressed, however, does not mean that there is an incapability or an inability to be intellectual or to address problems in these terms. But it is this attitude which becomes the basis for the rejection of the notion that there is a capacity for intellectual activity.

I will conclude by suggesting that young people today are not quite certain as to what we are about in our school and welfare programs. I am inclined to believe that when we say we do them good and wish them well, we fail to recognize the cultures which have developed and are reshaping their lives. The rejected see the need for radical re-examination of our traditional and institutionalized practices.

There is a major crisis in education, and not the least important aspect of this is the crisis in higher education, particularly at the level of the junior college. Here, perhaps is to be found a significant group of youngsters who have dropped by the wayside. They can be engaged by addressing the fact of their sub-culture identity. They can instruct us of themselves. The universities and colleges must see this and look at junior colleges as laboratories, as a real opportunity for better engagement for better understanding. Thank you.

■ CHAIRMAN AXELROD: It is always interesting for me to speculate as to what an audience like this feels, what its dominant reaction is when they hear a talk of this sort. Since this is an intelligent audience I think I can assume that the reaction on the part of *no one* here is a reaction of apathy. But it seems to me, however, that there are still several other categories of reaction. I imagine some of us are frightened, suddenly. Of course we were *before*, but we tried to cover it up. And suddenly this fellow comes along and pulls the cover off and we feel frightened because we feel powerless. We feel that there really isn't anything we can do, either because we don't have the ability to do it or because we feel the conditions aren't right.

Then I suppose some of us may even be hostile. We may feel that it is all exaggeration, and things are really—if you *really* look at them—relatively good. In other words, the world is all right. Then there are those of us who feel the opposite is true, but we may still be unwilling to accept this speaker and what he stands for. Such a person is now saying to himself, "Well, it's *not* an exaggeration; but, you know, that's the way the world *is*. Things are tough."

But I would hope there is a certain kind of—I don't know what the term is—maybe "encouragement." Hopefully Mr. Lohman's address has given us a kind of confirmation that what we have thought and the way we have tried to face the problem, really we are right and that we were thinking and moving in the right direction. I hope that a large number of us had that reaction rather than the reaction of being frightened and overcome by the feeling of powerlessness or the reactions of hostility.

The way the program has been planned, Mr. Johntz' talk is really the other side of the same coin that Mr. Lohman's talk is about. That is to say, what Mr. Lohman presented was the total shape of some of these problems and what Mr. Johntz is about to present is a concrete illustration showing how, in a given project in Berkeley, some dimensions of the problem that Mr. Lohman spoke to, are being attacked.

I am going to tell you something, very briefly, about William Johntz' background. He has a B.S. degree in psychology from Duke University but his teaching credential in California is in mathematics and physics; and this he received from the University of California, Berkeley, in 1947. Mr. Johntz has had 18 years of teaching experience at the elementary level, at the secondary level and at the adult level, most of it in California public schools. And it was Mr. Johntz who conceived, developed, and who now directs a program designed to teach abstract, conceptually oriented mathematics to culturally disadvantaged elementary school children. By the way, when I say the words, "culturally disadvantaged" from now on—that last talk had an effect on me—I'm going to put it in quotes. The project that Mr. Johntz is directing has grown during the two years that it has been in existence from a one-teacher operation to the point where it now involves eight highly trained university-level mathematicians. Mr. Johntz is not only going to tell you about that project in some detail but he is going to talk about certain kinds of testing implications also. I want to add that Mr. Johntz serves as a consultant for the Project

Upward Bound which is the college-preparatory program for disadvantaged secondary students that is sponsored by the Office of Economic Opportunity. So without further ado I would like to present Mr. William Johntz.

Teaching and Testing the Disadvantaged

WILLIAM JOHNTZ

There is much controversy today over the use of the term, "culturally disadvantaged." I agree that the term, "culturally different" has its merits, but I do not believe it goes far enough; it fails to connote that the individual in question is a *victim.*

When I use the term culturally different, a strange bit of imagery comes to mind: Let us assume I am standing with my foot on the neck of a man who is lying on the ground; I am wearing a hobnail boot. I say to him, "Your culture is simply different from mine, not worse; you are horizontal and I am vertical." And then I say to him, "Your culture has certain advantages over mine; you do not have to worry about falling down. Furthermore, you are developing a very interesting adaptive behavior. You are learning to breathe with my foot on your neck.

My point is this: The disadvantaged are culturally different. Their cultures have many virtues resulting from centuries of coping with the cruel and oppressive circumstances in which they have been forced to live. Nevertheless, one cannot deny that they are still victims. It is said that the blind develop a very acute sense of hearing. We might use this knowledge in many interesting and valuable ways, but we go on compensating for the blind man's loss of sight, thereby acknowledging that he is a victim. In much the same way, we must recognize the remarkable adaptive behavior of the disadvantaged while we acknowledge that he is a victim.

I think we must not lose sight of this. It is so easy to lapse into the position the white Southerner has held for so many years. He will tell you, with at least conscious sincerity, that the Negro's condition is just *different*, not worse. He likes it out there in those cotton fields, he gets a lot of sunshine that way, and his life is simple; he

has fewer problems; he does not have to worry about the complexities of the middle class.

Now I should like to turn to one of the common problems of the disadvantaged, one already referred to this morning. I believe, along with many other people, that one of the major problems of today's disadvantaged student is his lack of motivation. I further believe that his lack of motivation results chiefly from the absence of success models within his culture with which he can identify. One of the major differences between the middle class child and the disadvantaged one is that the middle class child does have *someone* who is successful with whom he can identify—a relative who is a professional, perhaps his own parent. If not in his immediate family, he is likely to have within his extended family, or among his parents' acquaintances, a relative or friend who is his model of success as conceived of by middle class values.

I am not here this morning to evaluate the virtues of the American middle class. That is another subject. I am assuming, however, that in terms of education, the middle class has some merit.

Now, if we take the Negro as an example of the disadvantaged—I will frequently refer to the Negro as the prototype of the disadvantaged in this discussion because, first, I feel his is the most disadvantaged of all the disadvantaged groups; and, second, because I believe that in most urban areas today he is statistically the most prevalent. Please do not think when I refer to the Negro that I am talking about genetic characteristics; I am not. I am talking about environmental characteristics, cultural characteristics.

Taking the Negro as an example of the disadvantaged, we find he is almost totally lacking in models of success with whom to identify. He does not have them in his immediate family, he does not have them in his extended family, he cannot walk down the street and find a friend in the neighborhood who enjoys professional, or similar middle class, success. Furthermore, he can find few vicarious models of success within his cultural sub-group.

This is the respect in which the Negro differs culturally from European and Oriental immigrants who came to this country poor and lived in slums. People often ask why the European and Oriental immigrants have risen from stark poverty while the Negro has failed. Their problem is entirely different. The European immigrant living in the slums of America does have models of success, if not in his immediate surroundings, then vicariously, from the historical and

cultural contributions of his particular ethnic group. He can look in a book and find a picture of someone whose name sounds like his own. When he reads a newspaper or looks at television or listens to the radio, it is possible for him to see or read about someone like himself; and when he has this experience, he can begin to emulate the person with whom he has identified.

The Negro, until very recently, not only had no real models of success, he was almost wholly lacking in vicarious models. If he turned on the radio, he heard Amos and Andy. If he went to the movies, he saw Stepan Fetchit. All the standard models representing him were clowns at best. Hopefully, genial, cheerful clowns, but seldom anything else. When the Negro looks at his history, all he can see is slavery or its post-bellum surrogate.

In the last five years an effort, sometimes ludicrous, has been made to remedy the situation. Now, I think, the television producers all say we have to get "one of them" in there somehow, sometimes with bizarre results; but even this crude beginning is an improvement.

It is my understanding that the State of California now considers rejecting textbooks that fail to represent accurately the ethnic and racial minorities of our society. This may seem to be a trivial matter to the average member of the white middle class, who is so accustomed to seeing people who look and act like himself in the books he reads that he finds it difficult to understand the feelings of the Negro, or other minority group member, who rarely sees himself depicted in the books he reads. I am sure that on an unconscious level this is very damaging to the Negro child, who may not say, "Where am I?", but who nevertheless is puzzled and affected by his absence.

A closely related and equally important problem, and one already alluded to this morning, is that of self-image. I personally consider this the number-one problem of the disadvantaged person in our society today.

He hates himself, and his behavior is designed to camouflage his self-hate. I know some of you here who are teachers will insist the Negro kids are the cockiest kids in your classes. But I wonder how many of you realize that they simply wear *masks* of defiance and cockiness in feeble attempts to cover up their feelings of insecurity and inferiority?

Perhaps as black a chapter as exists in the history of the United States is the one that deals with race relations. The majority group,

the Caucasian, has for 300 years perpetrated the myth that the Negro is inferior. I really know of no more horrible act a people can commit against another group than this.

The Negro has responded in an understandable, but extremely unfortunate, way. He has made the terrible mistake of believing the myth, the myth of inferiority. As long as he believes he is inferior, he will behave as though he is inferior, and all programs designed to provide compensatory education for disadvantaged children that do not take this into consideration are, as far as I am concerned, doomed to failure. Any program that makes a serious effort to motivate the disadvantaged student in our public schools today has to start with the proposition that somehow the *child's self-image must be changed.*

This was one of the thoughts that led me three years ago to start the project in Berkeley that I would like to describe to you today. I asked again the questions I had been asking myself for twenty years; how can one change the image of the disadvantaged? How can one change his view of himself? I think some well-intentioned educators have the notion that you simply get a group of children together and say, "You know you are all right. You're okay; it's all over. We are not going to treat you that way any more." And they might even say, "We were wrong." But one simply cannot turn off the psychological effects of centuries of discrimination, oppression and derogation as one would a light switch.

There is only one way to change the self-image of the disadvantaged, and that is to create a situation in which the individual student has a genuine success experience. *It must not be a phony success experience.*

Some of our public school teachers have come to the conclusion that what one does to accomplish this is to watch intently all day, and if a Negro child does *anything* right, go into rhapsodies. This is patronization of the most boorish sort, and don't think the Negro does not realize it. His success experience must be meaningful and significant if it is to have the desired effect.

I have had an interest in mathematics and have taught the subject for many years. I kept thinking that if the disadvantaged student could succeed in mathematics, since mathematics is a high status subject in our culture today—perhaps it is much too high status, but the reality is that it is high status—he might change his self-image and, consequently change his general motivation.

Most of the literature pertaining to the disadvantaged tells us endlessly that the disadvantaged child cannot work with abstractions. This, in my view, is one of a number of dangerous and widely-held myths concerning disadvantaged children. We are told repeatedly that to teach the disadvantaged child, one must present him with the concrete and avoid the abstract.

The more I thought about this view, the less happy I became with it. If one of the reasons for the disadvantaged child's failure in school is his culture, then why would it not be reasonable to choose as an area for success a subject unrelated to the culture? I am saying this to you: The more abstract or acultural a subject is, the better suited it is to provide the disadvantaged student with a success experience.

The most commonly taught abstract subject, or potentially abstract subject, in our curriculum today is mathematics. As mathematics is taught on the elementary level, and frequently on the secondary level, it really isn't abstract; it is taught in a series of memorized techniques. It is in the category of nuts and bolts. The student learns to operate a rather complicated machine. This is an exceedingly unfortunate conception of math, and it is not basically what mathematics is all about.

Most of you were subjected to that kind of mathematical education. You probably dislike math rather intensely, and you perhaps freeze at the very thought of coping with something mathematical. You have my sympathy. It probably is the reasonable response of an intelligent person toward traditional mathematics curricula to reject it, to dislike it; and if he has any integrity, he flunks it.

Most people do not have this kind of integrity. They play a game and a game is played on them, but they don't have the guts to flunk the course. They memorize the rules, they don't know what they are doing, they put down the answers, and if they are clever, perhaps get "A's" or "B's" in the course while selling their intellectual souls for a mess of grade points. (Fortunately, curriculum changes are occurring in mathematics today which we hope will reduce the necessity for this kind of enforced dishonesty and psittacistic compliance.)

Now, let me return to my two points; one, that the more abstract a subject is, the better suited it is to the disadvantaged child in terms of success; and two, that this success is the key to his change in self-image, which, in turn, is the key to motivation.

With this in mind, I started a project in Berkeley that involved teaching abstract, conceptually oriented mathematics—high school algebra and co-ordinate geometry—to disadvantaged elementary school children.

Since I already had a full-time commitment to the high school, it was necessary for me to spend the first year teaching the course during my lunch period, conference periods and study halls. When the success of the project became evident, however, I was given fewer classes at the high school in order to devote more time to it. From the beginning the children's responses far exceeded my most sanguine hopes. The method of teaching I use—and this is absolutely crucial to the success of the program—is the discovery method. We do not use textbooks. We, for the most part, do not use printed materials. We simply ask the children questions about mathematics, and if they cannot respond to the questions, we think of simpler questions to ask them. If a student asks us a question, we do not answer it, but with rare exceptions; we simply reply with still another question. This procedure, together with the absence of textbook recipes, prevents the student's memorizing techniques he does not understand.

I am a purist about the discovery method. I feel it is unquestionably the best way to teach abstract mathematics to anyone; I feel it is absolutely essential when teaching abstract mathematics to disadvantaged children.

When taught mathematics by conventional methods, the typical middle class child, the one for whom math does not come easily, will take his home work assignments home to mama and daddy. Mama and daddy study the book diligently, perhaps phone a few people, and after considerable joint effort, the assignment is finished. The child, with his parents' help, understands something about what is going on.

On the other hand, the typical disadvantaged child does not have this kind of experience. Ninety-nine chances out of a hundred, his parents do not have the necessary knowledge and/or acquaintances to give him the kind of help he needs. And even if they do, they are probably too tired from working at menial jobs all day to care. So if the child does not understand the subject in the classroom, the chances are negligible that he will ever understand it. The discovery method is the one teaching method that assures his understanding the subject without outside help.

Another essential feature of this program—and one inextricably tied to the discovery method—is that the instructor must be a person well-trained in mathematics. The discovery method is a teaching technique that welcomes the unexpected; its success is wholly dependent upon the teacher's ability to recognize the merit of extremely varied responses from the students, even when those responses produce wrong answers. The teacher's role is emphatically not the unfortunate traditional one of dispensing the gospel for receptive ears to accept unquestioningly; it is one of setting the stage, of asking questions, above all, of listening with concentrated intentness to what the children say. The teacher must feel free to let the intellectual ball roll where it will. Only the well-trained mathematician has the breadth and depth of knowledge to allow for such freedom.

Second graders often ask very profound questions about mathematics (although our experience with first graders is limited so far, I suspect they, too, ask very profound questions). They sometimes give relatively profound solutions to mathematical problems. To the person not trained in mathematics, these questions and answers frequently sound absurd. The typical intelligent, competent elementary school teacher without advanced mathematical training does not possess the subtlety of understanding to properly evaluate a unique mathematical observation, nor to formulate a new question from that observation.

Furthermore, the teacher not well-trained in mathematics usually does not understand the significance of a wrong answer. Wrong answers, frequently, are arrived at in extremely significant ways mathematically. It is theoretically possible for a child to make a grade of zero in terms of correct answers on a math paper and be a potentially outstanding mathematician.

In addition to myself, the people who teach in my project are, for the most part, Ph.D. candidates in mathematics from the University of California in Berkeley. They became interested in the project as a result of observing my classes for a day or two. A number of them expressed an interest in teaching there themselves.

Now, it is fashionable these days for university people to dabble in slum schools one or two hours a week. I do not intend to derogate their good intentions, for some part of what these people do is useful. However, I feel most of it is merely token and serves largely to ameliorate guilt feelings.

The Ph.D. candidates who teach in my project are not dabbling.

Each of them teaches one full hour three to five days a week. He teaches a normal-sized class and takes full responsibility for the teaching.

People often suspect that the interest of these university students grows out of their commitment to civil rights and the disadvantaged. Although all of them are socially-conscious and seriously concerned about the disadvantaged, they are attracted to this program largely because of the exciting mathematical work the children can do, frequently comparing them favorably with university students they have taught.

I should like now to call your attention to the significant career of Robert Davis, a distinguished mathematician who taught at MIT for many years. During that time he became convinced that the mathematical problems of his students lay on the elementary level—an interesting observation since MIT students are the cream of the mathematical crop. He then did a very interesting thing, and a very wonderful thing. He stopped teaching at MIT and started a project of teaching abstract, conceptually oriented mathematics to elementary school children.

He worked for years with advantaged children. Now he is working in the slums of St. Louis as well as with advantaged children. Dr. Davis says, in effect, the years of the fourth, fifth and sixth grades may very well be—indeed are—the golden years for learning abstract, high level mathematics.

I personally feel this is the single most important discovery that has been made in regard to the teaching of mathematics during the last several centuries. Mathematics is a child's game in the best sense of the word; perhaps mathematicians do not like to hear it phrased this way, but mathematics has a game-like quality to it, and children love it.

I would like to comment upon the game-like quality, for you may be asking yourselves, "What is going on? Why are they successful?" I don't really know what is going on, but I do know they love it.

The attention span of a second grade class is supposed to be 15 seconds if advantaged and 5 seconds if disadvantaged. But we can talk with a second grade class in this Socratic way, asking questions, for a solid hour. At the end of the hour they are waving their arms wildly, often asking for more. They sometimes stay in during recess to do more math. When I see their degree of involvement, I am a little frightened.

An important question often asked about this project is, of course, does it affect the students' behavior outside of mathematics? I think the answer is yes. A number of classroom teachers report that children who are involved in the project show very significant personality changes. I think the explanation is simple. The children are having a success experience in a subject they know is high status, and they like themselves better, they become more cooperative, they read better, they talk better, they work harder.

Mathematics is extremely important in this particular project for another reason which has been discussed by some of the previous speakers this morning. It is the whole question of getting disadvantaged children in to college. Most of our program now in Berkeley is conceived of as an elementary college preparatory program for disadvantaged students. If a student can succeed in mathematics, he has taken a major step toward getting into college. If his success in mathematics can motivate him to learn to read well, and with understanding, and, perhaps to express himself well, his chances are excellent.

One can get into college, if, in the broadest sense, he is competent in mathematics and in the English language. The greatest stumbling block to getting into major, four-year universities throughout the United States, for advantaged and disadvantaged students alike is mathematics in one form or another. It may be the requirement of a year of algebra and a year of geometry. It may manifest itself in another way, in the difficulty that students have with courses like physics. Consequently, I feel that a college preparatory program on the elementary level that succeeds in enabling students to do mathematics successfully and competently will have made a major contribution toward getting those students into college and this is precisely the way this project was conceived.

The University of California sponsors a project for disadvantaged secondary students called the Special Opportunity Scholarship Program. This program was started two years ago by the faculty of the University of California by monies contributed out of their own pockets. The Federal Government, in the form of Project Upward Bound, is now supporting projects of this type.

I am extremely happy to report that the University of California made an exceedingly rational step in submitting a proposal to the Federal Government that did not limit its college preparatory program to secondary students, but extended it from grades one through

fourteen. It is, to my knowledge, the only such project that has been submitted.

The elementary phase of this program is, essentially, the project I have described this morning. Project Upward Bound is so written, unfortunately, that it appears, at the present time, to be legally impossible to fund directly the elementary phase of the University's proposal. But the mere fact that a university has submitted one is an extremely important step.

Earlier presentations this morning have alluded to the question of where we should concentrate our efforts to best help the disadvantaged—and on what grade level. References have been made to Project Head Start, and the desirability of moving some of the projects from the secondary level downward, and also of moving some upward. I would like to say that I do not believe we are going to get significant numbers of really disadvantaged children into four-year universities unless we work with them throughout their entire public school career.

You may say this is a terribly pessimistic statement. I think it is a realistic statement. One can look into various projects in which students have been assisted very intensively at certain grade levels and find improved performance while the students are at that grade level. These findings are very important, but I would like to see efforts to assist disadvantaged children at *all* levels—for only then will we see them entering major, four-year universities in significant numbers.

If such projects were started in the early elementary grades, it is entirely possible that by the time the child reached the secondary level he could carry on with minimal help and a relatively small expenditure of time and money although I do think there needs to be some psychological continuity in a college preparatory program straight through the 12th grade—and the University of California, at least, feels through the 14th grade.

If we do not have enough funds—and we don't—I believe we should concentrate our efforts at the elementary level. The reason is the terribly trite one that an ounce of prevention is worth a pound of cure. The disadvantaged second grade child is not nearly as disadvantaged as the disadvantaged 8th grade child. The 8th grade child has had six more years to learn that he is no good. His negative self-image has been more indelibly imprinted upon his psyche. Some of the second grade disadvantaged children, thank heavens,

are not yet vividly aware of this. They have already begun to sense it, but they are not yet absolutely convinced they are no good. It becomes increasingly difficult to undo the negative self-image after the child has lived with it for years.

Another kind of consideration is the one referred to earlier, when I stressed that some subjects, such as mathematics—foreign language is another—are particularly suited to young children. This is a highly persuasive argument, not only as it applies to the disadvantaged, but to the advantaged as well, for increasing the expenditure of money at the elementary level in *all* schools. I hope the day arrives when we have sufficient funds to carry such programs throughout all grade levels. But when we are confronted with the allocation of existing funds, I think we must realistically face the fact that these funds should be devoted primarily to the elementary level. In a very real sense when we decide to take a block of money, spend it on the secondary child and not on the elementary child, we are writing off the elementary child as well since his success or failure is actually determined at that age. Project Upward Bound, devoted to the secondary school student, is spending an average of $1,200 per year per student at the 10th and 11th grades. I sincerely believe that $1,200 spent at grades two and three and four could save 10 or 12 children at those levels.

The two criteria we have to consider in the allocation of public school funds in the United States today are the following:

NEED

We are now moving in that direction at long last. We are not simply allocating funds on the basis of how many children there are. We are beginning to allocate funds on the basis of numbers of children and also the *needs of those children*. This is what compensatory education is all about.

Some people find this highly offensive. There is a strange paradox about preferential treatment in our society. We give preferential treatment to all kinds of people, but when this is proposed for the education of children, people become very uneasy. If a child contracts polio, the state and local governments are willing to spend thousands of dollars to aid him. If that same child sits in a slum school not learning to read, an ego disease as tragic as polio, and someone suggests that we spend a hundred dollars extra on him, everyone is shocked.

We accept preferential treatment for the aged. We accept preferential treatment for the neurologically handicapped. We accept preferential treatment for youth in certain categories, but it is incredible that it took us until 1960 to seriously accept the proposition of preferential treatment in education. The disadvantaged child will never catch up with the advantage child unless we provide massive preferential treatment for him.

FEASIBILITY

This brings us back to the elementary-secondary argument. Feasibility indicates that until we have enough money, we must allocate these funds primarily to the elementary level.

The project I described to you earlier, as well as the psychological, sociological, and pedagogical theories underlying it, have, I think, important implications for testing.

Most of you in this audience, I am sure, know perfectly well that the scores appearing on tests do not always accurately measure what they were intended to measure. I am sure that most of you also realize that the discrepancy between the score and the reality of what it is purported to measure increases with the degree of the disadvantagedness of the person being tested. At the risk of employing a cliché upon those in the audience whose profession is testing, I shall outline a few of the factors that militate against the success of disadvantaged students in taking tests.

a. Motivation. Disadvantaged students do not try very hard when taking tests. Teachers who administer the tests characteristically react to this lack of effort with responses ranging from utter dismay to feelings of absolute betrayal. They do not understand that the disadvantaged child simply does not take symbols on paper very seriously—in contrast to the middle class child who does, because, throughout his life he has been surrounded by people who take symbols seriously. Every day in his own home he sees people intently reading symbols on paper, if only the newspaper. In short, the middle class child is surrounded by models of "symbol lovers" to identify with, the disadvantaged virtually none. The vicarious, surrogate world of symbols is a middle class phenomenon. The Symbol Age has not yet permeated through all cultures of human society.

b. Reading. Most testing is done via the written word; the disadvantaged child is usually a poor reader.

c. Vocabulary. Middle class English is the language used in writ-

ten tests. This is almost a foreign language to most of the disadvantaged.

d. Sense of Time. Most tests have a specified duration. The disadvantaged child often has a very loose-jointed sense of time and the future.

e. Listening Skills. The lack of listening skills that characterize the disadvantaged child greatly interfer with his success on tests, both written and oral.

f. Manipulative Skills. The disadvantaged is less skillful with pencil and paper than his middle class age peer.

I am sure this list of handicaps militating against the disadvantaged child when he takes a standardized test is not complete; but it does indicate the kinds of problems the test maker faces when he devises a test to measure the talents of disadvantaged children. Basically, the standardized tests used in the public schools today are middle class devices designed to measure and compare middle class children and they do not work well with disadvantaged students. We have to find a way that does give a meaningful measure.

I believe the math project I have described to you may provide a means of penetrating the heavy "lead box" in which the disadvantaged hides his raw abilities.

The idea that teaching abstract, conceptually oriented mathematics from the discovery point of view might have important implications for testing, came to me as the result of the following experience.

In the Spring of 1965 I decided to experiment with teaching abstract conceptually oriented mathematics to the lowest-ability fourth grade class in Berkeley's lowest socio-economic school. The children in this class were described to me as border-line mentally retarded and their regular classroom teacher exhibited more than mild skepticism when I proposed teaching them modern high school algebra and coordinate geometry. In any event I introduced negative numbers to the class on the first day, as we do with all of the classes from grade two up. The children showed great enthusiasm and although their pace was slow, at the end of the first class period I had spotted three of these border-line mentally retarded students who, I felt, had I.Q.'s in excess of 120. At the end of the period the regular teacher confessed, with total incredulity, that a few of the students were picking up on the material more rapidly than he.

Several weeks of further work with this class confirmed my belief

that some of these border-line, mentally retarded children were extremely intelligent. Tests these children had taken had never indicated their intelligence, nor had their regular teacher been able to spot them, although he is a bright, sensitive and experienced teacher of disadvantaged children.

During the '65–'66 school year I have continued to receive reports from the other mathematics consultants in the project that they too often discover cases of hidden talent during even the first week of the course.

What all of this suggests to me is that perhaps we have hit upon a new kind of intelligence testing that might be characterized as informal group-oral testing.

Why does abstract, conceptually oriented mathematics taught by a highly trained mathematician using the discovery method enable him to see through the "lead-box" while other methods fail? I would suggest the following factors as being relevant:

1. *Non-test Test.* The style of teaching used in the project is highly informal. All we do is to ask questions in a friendly, relaxed manner. We try very hard to see merit in all answers. We do not classify answers as right or wrong. Often excellent reasoning results in a "wrong answer" because of technical error. The whole atmosphere of this kind of experience is the opposite of the normal testing situation. All the formal paraphernalia of testing, such as printed materials, special pencils and precision timing are absent. The entire experience is open-ended psychologically as well as temporarily. This non-test atmosphere, I think, is necessary to free the students' minds and allow them to manifest their latent talents.

2. *Group-oral Quality.* Our class sizes average around 25. This is large enough to enable the student to "hide" while he is thinking. There is an anonymous quality to the whole setting. The student does not feel on the spot as he does when he is alone with a tester during the usual oral testing situation.

3. *Non-dependence on Reading.* About ninety percent of our class work is oral. The student's performance is not limited by his reading ability. Some non-readers who are actually brilliant often begin to read after a few weeks in the course.

4. *Abstraction.* The material we present is highly abstract. So many I.Q. tests are really tests of "prior experience." Although prior experience may play some extremely subtle role in highly abstract reasoning, it is in no way certain that the advantaged child's culture is

richer in this type of experience than is the disadvantaged child's.

5. *Relational Thinking.* If we assume that intelligence is the ability to generalize and to see abstract relationships, then it becomes apparent that the more the tester knows about the subtleties of abstract relational reasoning, the greater the probabilities are that he will be able to assess these same abilities in the person being tested. I would suggest, then, that one of the reasons the mathematicians teaching in this project are able to see through the "lead box" is that they are much more experienced in abstract relational thinking than are most of the people who give oral I.Q. tests. The written I.Q. test, with its multiple choice questions, is an exceedingly crude instrument for measuring the complicated act of human reasoning. Reasoning is a *DYNAMIC* which can best be evaluated by the *ad lib* questioning of a person thoroughly experienced in abstract relational thinking.

University level mathematicians and graduate students constitute, I think, the greatest untapped reservoir of testing talent in the U.S. today. Specifically what I would propose is that some of the testing organizations employ trained mathematicians to go into the elementary schools of America's slums and use the discovery presentation of abstract, conceptually oriented mathematics as a new type of group-oral I.Q. test. At the end of one week I think that the teacher-tester would have a much better knowledge of the intelligence of these students than any combination of standard written or oral tests could reveal. I would not wish to see any child who did not respond in this situation classified negatively, but this would not constitute much of a problem since our methods usually obtain very wide student participation.

I would like to conclude my presentation today by reminding the testing establishment of the tremendous moral responsibility it has in our society today. We live in an age in which we not only worship symbols in general, but at the pinnacle of the symbol altar is the *numeral*. If we attach a numerical index to an animate or inanimate object, we suddenly feel that it has somehow taken on a greater reality than it previously had. We are like the person who, when travelling abroad, never looks up from the guidebook description of the cathedral he is visiting to look at the cathedral itself. People have come to distrust direct experience, symbols have taken the place of reality. Modern man feels completely emasculated without his briefcase full of symbols and numerical indices.

This is particularly true when he is asked to *evaluate* something or someone. In spite of the frequent and almost anguished protestations of fallibility on the part of the testing establishment, public school counselors and industrial personnel directors still sit hunched behind their desks "looking" not at the applicant or counselee on the other side of the desk, but at the folder of numerical indices that "represent" the person. If the person on the other side of the desk happens to have a black face, the numerical indices in that folder frequently constitute a libel in that they are an unjust derogation of the man's talents. When we hang an unjust I.Q. score around the neck of a disadvantaged child, we are, in effect, branding him for life.

I sincerely believe that the testing establishment should declare a moratorium on the testing of disadvantaged children, except for experimental purposes until they can come up with I.Q. tests which accurately measure the intelligence of the children tested. The testing establishment must stop trying to absolve themselves of guilt by proclaiming that counselors, personnel people and teachers simply misuse and misinterpret those scores. They must realize it is inevitable that the people who work with the scores are not going to understand all of the sophisticated qualifications necessary to avoid misusing them.

If the testing establishment does not come up with some tests that do a better job of measuring I.Q. it would not surprise me if a part of the Negro protest movement were to take the form of a refusal to take I.Q. tests.

I am not here to say that testing should be abolished. But I do say that we should quadruple our efforts to find tests that do, in truth, measure latent ability. When that day comes, we will be in a position to use test scores in the creative way they were intended to be used.

■ Chairman Axelrod: It is the duty of a chairman, when he comes to open an afternoon session to summarize what has happened in the morning. For your sake I am glad to report that because we have had to open the afternoon session late, the chairman regretfully will omit any summarizing remarks.

Let me introduce our next speaker, Murray Schwartz. You will notice from the program he is listed as Professor of Law at UCLA. It is interesting, therefore, for me to see on his list of degrees and posts, that his first degree was a Bachelor of Science in Chemistry which he received in 1942. Then an LL.B. from the University of Pennsylvania Law School; then a few years of service as law clerk to Chief Justice Vinson; a couple of years after that as special assistant to the United States Attorney General; some years as the first Deputy City Solicitor in Philadelphia; then some years of private practice; and then Professor of Law at UCLA and Assistant Dean of the UCLA Law School for part of that time.

During a number of those years he served as consultant in the Task Force on Law and Public Awareness in the President's panel on mental retardation; and in 1963–1964 he served as a consultant in the President's Task Force on the War Against Poverty. From 1963 to the present time, he has been serving as the vice-Chairman of the California State Bar Committee on Group Legal Services. Mr. Schwartz' topic is "Teaching the Bill of Rights in the High School." In answer to a question about his relationship to this topic he informed me that he is a consultant to the State Department of Education on the preparation of a source book for teaching the Bill of Rights in the high schools. So it is going to be interesting to hear, in view of his background and his approach, what he has to say about teaching the Bill of Rights in the high school. Professor Schwartz.

Teaching the Bill of Rights in the High School

MURRAY L. SCHWARTZ

I have had a vague feeling of uneasiness which wasn't clarified until Mr. Johntz began his talk. I then realized that my uneasiness was because I had little identity with the audience, but, as he continued, I realized that I do have an identity—I am a dabbler. I am one of those people whose only contact with the high school after thirty years or so, was through my own children, until I became involved with this particular project. In a substantial sense, it is quite presumptuous of me to talk about how I think things

ought to be done to educators who are concerned daily with public school problems.

Secondly, I am disqualified, I think, because what I am going to talk about is not directly related to the general subject of the morning: the problem of the culturally disadvantaged or the deprivation of culture. I shall, however, try as best I can to relate our materials to that problem.

Thirdly, I am disqualified, because I am going to talk about an experiment which hasn't yet been tried. I am going to talk about materials which have not yet, in their present form, been used anywhere. Although some part of earlier versions were used experimentally in very small projects I am, by and large, going to tell you about materials which, until last Saturday, had not been put in final form. Nevertheless, I think my topic has relevance to practically everything which has been said this morning; and I shall certainly try to relate my remarks to that which has gone before.

What I shall talk about is a project, which by the title of my talk is addressed to the problem of teaching the Bill of Rights in the high schools. I shall try to relate that project to problems of testing, and, perhaps, if time permits, proceed to what I consider to be one of the major problems of education in this country today.

Everyone who reads the polls and surveys is quite aware that the general education of the American public and the American student about the Bill of Rights is woefully deficient. This has been proved—to the extent that polls prove phenomena like this—over and over again. Although everyone bemoaned the fact very few were willing to try to do very much about it. The California State Board of Education, about a year and a half or two years ago, resolved to do something about it. They did two things which, at first blush, look very traditional in terms of how a bureaucratic organization approaches a controversial issue—they adopted a resolution and appointed a committee. I am very pleased to report that in this case something eventuated. The resolution which I think is worth reading, was as follows:

> No student shall leave our schools without a lively knowledge of the American Constitution, for here are found the main principles of our heritage. Our democracy can be kept strong only by the dedication of every new generation to the discipline of liberty. In knowledge of the Bill of Rights, and in loyalty to its proposition rests our faith in the future. We believe teaching in this field, no matter how controversial the issue, should be con-

> ducted within the framework of free discussion. Not only the history of the Bill of Rights should be taught, but contemporary issues it raises, such as the debate over separation of Church and State embodied in the First Amendment, and the privilege against self-incrimination as provided in the Fifth Amendment should be discussed. Now is the time to help our young people to become aware of the risks, the privileges, and the personal demands of freedom. We urge all school superintendents to give this subject the highest priority. We hope that the very conduct of the classes studying the Bill of Rights will reflect its spirit and be a demonstration of civil rights in action."

The State Board appointed a subcommittee composed of four of its own members, headed by Bishop Kennedy. That subcommittee in turn appointed an advisory committee composed of a very distinguished group of citizens, headed by Dean Richard Maxwell of the UCLA School of Law. One result of this impetus was the production of a book which I shall describe in some detail. However, it is worthwhile, I think, to point out in advance, or to explain exactly why this book has the form that it does.

First of all, it is aimed at the 11th and 12th grades in high school. There are several natural factors, I think, which influenced this decision. One is that the courses in history and government in the 11th and 12th grades seemed the most logical in which to try to incorporate the concepts of the Bill of Rights.

Secondly, I suspect it is because the people on the advisory board and the staff were more familiar—to the extent that they were familiar with public education—with the high schools, than they were with the grades below. In any event our first thought was to prepare a more or less traditional curriculum guide, a manual which tells the teacher what he or she ought to do in developing a particular subject. Interestingly enough, however, when we proceeded to undertake this, we soon discovered that there were absolutely no materials available for either the teacher or the student which, in our viewpoint, were satisfactory in terms of presenting the issues created by the Bill of Rights. In my view, the current textbooks on history and government—I can tell you, because I read them in preparation for this project—did not begin to touch the basic issues with which we thought students ought to become familiar and with which they should be involved.

So, our product was very different. Our product is now known as a source book. There still are no student texts. Again, until Mr. Johntz

spoke this morning, I had thought this was a disadvantage. I had always assumed that a bad textbook was worse than none, but I had never realized that no textbook was better than one.

The source book is divided into five separate parts which do not have to be taken in any particular order:

1. The first part deals with the problems of judicial review, federalism and the Fourteenth Amendment.
2. The second part deals with equal protection of the law. This part develops in a functional way the problems relating to voting, education, housing, and employment.
3. The third part deals with criminal due process. This in turn, is divided into two sections. The first section takes seriatim, the number of Constitutional guarantees surrounding the trial process, the right to trial by jury, to being informed of the charges against you, the privilege against self-incrimination and the like. The second section of criminal due process deals with law enforcement, referred to earlier today as the present crisis in law enforcement. We have tried, as I shall point out, to explicate in these materials the interaction between the courts and the needs, or at least the asserted needs of law enforcement in respect to Constitutional guarantees.
4. The fourth part deals with the First Amendment and the freedom of speech. It is divided into three sections. The first deals with subversive speech, the problems created by people who declaim against the Government, who wish to overthrow it, and the like. The second deals with the problem of obscenity. The third deals with the problem known in the trade as time, place, and manner, when speech can be controlled because of traffic problems, because of interference with others and the like.
5. The last substantive part deals with aspects of religion. The first section deals with freedom of religion in the modern context, the second deals with the Establishment clause and treats in some detail the problems of prayer in the public schools and Federal aid to schools generally, including parochial schools.

There is a series of appendices. There ought to be nothing less controversial than appendices. However, in our case this may not turn out to be true. One appendix contains a bibliography for supplemental reading. Another is an historical index which attempts to guide the high school teacher into the material. It is in chronological

order. A briefly synopsized appendix contains a table of all cases which are cited in the text. A copy of the text of the Bill of Rights is included.

The present posture is interesting. The preface contains a statement that the writing on this source book stopped in February, 1966. The reason for this—and it is very hard to think of another subject where authors would have to protect themselves in this way—is the continuing state of flux of the Bill of Rights and its interpretation. In order to preserve our own scholarly reputations we had to say we stopped writing in February of 1966. As a consequence the version that you have seen can be titled—as a memorandum in connection with another project was recently titled—final draft number one.

I am confident that there is more in this source book than any teacher could possibly use, given the requirements of present curriculum. There is much more that could be worked in if a teacher would be willing to abandon most of the present history or government course. This was deliberate on our part; we wanted to give the high school teacher a spread of materials so that in terms of the interests and the needs of the students, selections could be made.

Some children responding to areas which have been discussed this morning, probably could not care less about problems of freedom of religion or establishment of religion. These are not crucial issues for them. On the other hand to some children the problems of segregation or the problems of law enforcement are very real. To other children the problems of freedom of religion, the establishment clause and free speech are much more important than problems of law enforcement.

We deliberately attempted to provide a superabundance of material so the teacher can adapt and use and select those aspects of the materials which he thinks best for those students in his particular classroom.

We do not have a catalog of the Bill of Rights nor do we have every one of the amendments developed in full. We made some selections about what we thought were, in terms of present interests and present dynamics, the most controversial and the most important. Consequently we omitted some.

During the course of our work something occurred which validates my point about February of 1966. I maintained very vigorously, when questioned earlier in the project, that over my dead body

would we put in anything about the Second, Third, and Ninth Amendments because these were amendments which had no current validity. Three days after I made that statement, the Supreme Court of the United States decided the birth control case, and for the first time in 100 years referred to the Ninth Amendment. Incidentally the Ninth Amendment is: "Those powers not delegated to the Government are reserved to the people" as opposed to the Tenth: "Those powers which are not delegated are reserved to the State." Maybe we should have put the Ninth Amendment in.

Although the content of the course is most important I consider the approach to be equally important. This is what I would like to dwell upon for the remaining minutes this afternoon. We tried as hard as we could to avoid a sterile catalog of historical incidents which are unrelated to each other and unrelated to today. We avoided the self-congratulatory type of treatment; "Aren't we great, because we have a First Amendment?" We tried to communicate to the teacher the nature of today's problems and the fact that today's problems do not have an easy solution. As a matter of fact—and this is a point I want to emphasize—these materials concentrate on uncertainty.

I don't have to tell you that this is a value-laden area. Talk about the Bill of Rights conjures up in everyone's mind all kinds of values. You can't turn around in this area without bumping into somebody's values. Because values are implicit or inherent in this area, the Bill of Rights has been considered controversial and therefore not suitable for teaching in the classroom.

I was told recently of a Los Angeles high school principal whose school is located in a culturally very advantaged area. Although his students are in a constant state of ferment about current issues and the like he is reported to have laid down an ultimatum that henceforward there would be no more controversial speakers or speakers on controversial topics in his high school. When asked his definition of a controversial topic he, apocryphally, I hope, is supposed to have replied, "Any topic that has two sides." My reaction was—there goes Euclidian geometry. If you look at the teaching of the Bill of Rights in any kind of perspective it is anomalous to consider it to be noncontroversial.

Before we undertook this project a good deal of the reaction was that it ought not to be taught because it is controversial. Now that the materials have been prepared, some who are in favor of them

have said, "We are going to teach these because they are controversial; and, by God, the other side is going to like it." However, in areas where there is such controversy the problem is obviously not simple. There are problems in knowing how to go about this. It requires some kind of philosophy. I would like to share with you the essentials of the philosophy underlying the preparation of these materials.

The first is a kind of "given." It is a social assumption. The assumption is that the greatest danger to our viability as a democracy is a polarization of attitudes, a polarization that prevents people who feel strongly on issues from communicating with each other. When this occurs they stand at opposite ends of the spectrum and shout and call names. We felt that one of the principal purposes of these materials, in terms of issues which really hit home with most people, is to keep up the dialogue; to prevent either side from taking a rigid position so that they no longer hear what the other side has to say.

On the other hand it is too often ignored that there is a great deal of consensus about the Bill of Rights. It is a very important step in a nation's history when it puts down as one of its fundamental principles the principle of freedom of speech or the principle of freedom of religion. In the 1790's these were revolutionary notions. It is interesting to note that as most of the emerging African countries form their governments today, their constitutions contain Bills of Rights which are carbon copies of our own. However, it is clear that their interpretation and their application of those provisions may be quite different from our own. Nevertheless, it is a very significant step, it seems to me, that they have established concepts of freedom as their aspirations.

No matter how the principles of the Bill of Rights are interpreted, I think you would get very little controversy anywhere if you were merely to state them in lay language. There are very few people who declaim generally against freedom of speech. There is a large area of consensus. We take this so much for granted that we ignore its significance. We concentrate on the aberrational circumstances, on the aberrational case, and think that this represents the entire picture. There is a large area—I have been repeating it too many times, but it is important—there is a large area of consensus about these matters. This is only really appreciated not by repeating it as I have done here, but by examining the controversial case. You can only appreciate it, in the present, if you test it, if you examine it in the

light of the next development, in the light of the next controversy.

The third assumption underlying these materials is that the explication, the development of current issues, makes for better understanding of these issues and better communication.

The fourth is that the Bill of Rights is a dynamic document and a vital aspect of everyday life in our society. And, as I have said before, many of the issues which are posed for us today have no current, no ready answers.

How did we go about implementing this philosophy or these assumptions? First, every section begins with a history, a history of the provision, but not an undirected history. The historical materials are developed in sequence so that when you get to the end of the history you are ready to deal with today's problems. Hopefully, enough is presented so that this history and the rest of the material will enable the student and teacher to deal with tomorrow's problems.

The materials then turn to what I keep referring to as today's problems, and I will again catalog some of them for you: the continued viability of the privilege against self-incrimination; the problem of aid to public schools; the problem of prayer in the public schools; the problem of search and seizure by police; the problem of confessions; the problem of freedom of speech to those who would deny it if they ever gained control of government. Each of these issues is analyzed in terms of not only the legal doctrine—and we have tried to de-emphasize this as much as we can—but in terms of a logical analysis of the implications of the various positions. We have included judicial decisions to the extent that we thought they could be handled, and to the extent that they were relevant. We attempted to set forth as dispassionately as human beings who have a personal point of view can do the values, the conflicts, the statements, the assertions, the arguments made by those who take one position on one of these issues, and those who take the contrary position.

Finally we followed each section with a series of learning experiences which are suggestions to the teacher on how to handle these matters in the classroom.

Perhaps a couple of examples will clarify it. Consider the privilege against self-incrimination. Perhaps it is not as controversial today as it was eight or ten years ago, but it comes up every once in a while, as in the reliance on the Fifth Amendment employed by the

Ku Klux Klan officials during recent Congressional hearings. There is legitimate debate about this privilege. There are reasonable people who disagree about whether it ought to be modified, abolished or expanded. We have set forth the history of the privilege; its origin; its basis; its context; its utilization over the years; its present status. What does it mean today? When can someone plead this privilege? What are his limitations? When can he not? When does he forego the privilege by other conduct? We have considered the privilege in the circumstances of the witnesses' claim and the defendants' claim, two very different problems. We have analyzed the question—whether it is appropriate to infer from a claim of the privilege against self-incrimination that the one who claims it is guilty. That is, is it logical, is it practical, ought it to be an appropriate inference, and in what circumstances?

At least several of these issues are matters of reasonable disagreement. What we have tried to do is to set forth the arguments and to present as best as we can the state of the law. But there is no eternal answer to these issues. There is only a current answer to some of them.

The same is true with respect to the Establishment Clause. Was the Supreme Court's decision in dealing with the New York Regents' prayer quite unusual? Was it a departure from precedent? On what basis did it rely? What are the arguments for or against prayer in the public schools? What is the controversy really all about?

We have done the same thing with respect to that aspect of the Establishment Clause which deals with Federal aid to parochial education, a question which is quite current in relation to the recently adopted Federal legislation. In each case, we have followed the materials with suggested learning experiences. All of these materials, all of this background, point toward the present unsettled decision, the unsettled question. All of it points to the question to which the teachers cannot either respond or be expected to respond with a definite answer.

In this sense, I think, these materials present either an extrapolation of or an extension of Mr. Johntz' reference earlier to the Socratic discovery. I always suspected Socrates knew the answers to the questions he asked. I am sure Mr. Johntz knows the answers to the questions he asks. But in this area, nobody knows the answers. They are, simply, unanswered questions. The purpose of these materials is to enable the student to deal with just that kind of problem,

the problem of the unanswered question, and to deal with it in a rational, intelligent, and communicative way. Those of you who deal in this field all the time—as opposed to dabblers—have heard the key phrase before. I employ it now to say that these materials are aimed at the increased toleration of ambiguity.

Let me turn aside for a moment to talk about collateral implementation. In the past we have had a number of teacher workshops in which we have tried to educate teachers with respect to earlier versions of the material, and some parts of these materials are a product of these workshops. There are workshops underway this summer with more teachers on the various campuses, and I am sure that this activity will increase. Incidentally, teachers from both the public and parochial schools have attended these sessions. This next school year, the school districts of Riverside and El Monte will be conducting major experiments with the use of these materials in their regular classrooms. The State Department of Education presently is preparing comparable materials for the elementary school.

An interesting experiment was run in Los Angeles which goes back to some of the things we were talking about this morning. I should have said earlier that the principal financial backer of this effort has been the Constitutional Rights Foundation, a non-profit corporation in Los Angeles composed of lawyers, movie actors and other wealthy people. Among its activities it sponsored six weekends at a camp in Los Angeles, six successive weekends for students in six high schools in Los Angeles which were all located in either Watts or other deprived areas. The students selected spent a Friday afternoon to Sunday afternoon weekend at this camp. During this time people like myself delivered lectures on or discussed with them the provisions of the Bill of Rights. We learned some lessons from this.

One lesson we learned was that even the most inarticulate of these students could get completely involved with this kind of material. For example in the session I conducted we started to talk about law enforcement. Most if not all of the students had had a run-in with the police. I'm sure that in their view these confrontations were for the most part unjustified. I started by asking, "Suppose we had to start all over again. Suppose we had to write the rules for the police. How would we write them? What kind of power would we give the police force? Would we abolish self-incrimination? Would we abolish the police force?" At times the discussion got so vigorous that I couldn't enter it, let alone pretend to lead it. Incidentally, we

ended with pretty much what we have today. The important point is that they got involved. In a later session a police lieutenant came to the camp and I was told it was the first time that the students had ever communicated with a police officer in a way in which their views were being listened to and they felt that they could listen to him. These materials are "natural" for this kind of communication.

Let me turn now for a minute to testing. I would like to enlist the cooperation of those of you who are professional testers. First, what is needed are some effective instruments for testing and evaluating the teacher workshops. We wish to know to what extent the teacher workshops in their present format are successful in accomplishing the objectives which I have described. A second, and possibly more important need, is the development of instruments for testing the success of the materials in the classroom. For this it will be necessary to be very clear on the objectives. I have seen, in just the brief time that we have been working, too many people who wish to use these materials to do too many things. They want to teach people how to be good, how to be moral, how to communicate with their fellow man and much else.

Let me be specific about what I think the objectives are. On the lowest level, the objective is information about the Bill of Rights, what it says and what it means. I suppose that is easy to test for. The second level is insight, and I draw the distinction to emphasize the point, how meaningful are these materials to the student? Not how well he can repeat what he was asked or was told, but how meaningful is the material to him? The third important objective is the toleration of disagreement. To what extent is a student who has been exposed to this methodology or to these materials better able to appreciate and accept the views of others? If he loses the argument is he nevertheless willing to remain within the system and not take his dolls and go home or throw bricks through windows? To what extent can these materials make an impact with respect to that issue? Finally, to what extent can these materials be shown to be successful by increasing the tolerance of ambiguity, the ability of the student to live in a world where he knows there is no certain answer, merely arguments and change.

We live in an age of revolutions—not revolution—revolutions. Professor Lohman referred earlier this morning to at least one or two—we all can think of many others.

It is not that we are living in a changing world—ever since man-

kind came out of the cave we have been doing that. The problem is that the rate of change is more rapid than ever before. We must train our people so as to enable them to live in that kind of changing world and to tolerate that rate of change. A fundamental educational problem for us is to educate our next generations to live with unprecedented rates of innovation, change and uncertainty. Perhaps these materials suggest a way of doing this. Thank you.*

* The official title of the publication referred to is "The Bill of Rights, A Source Book for Teachers," California State Department of Education, Max Rafferty, Superintendent of Public Instruction, Sacramento, 1966. If the publication schedule is met this document will be in the hands of every California high school social studies teacher in September. The staff which prepared these materials for publication are: Mrs. DeAnne Sobul, a high school teacher, now in the curriculum branch of the Los Angeles City Schools, Professor William Cohen of the UCLA School of Law and myself who were principally responsible for the writing. Mrs. Joyce Fadem, an instructor in political science at Los Angeles City College assisted in the editing and the organization of the workshops. Mr. Chase Dane, Director of Libraries of the Santa Monica Unified School District was responsible for the bibliography. Miss Marsha McLean, a Los Angeles attorney, assisted in one phase of the writing. Professor Keith Berwick of the UCLA History Department checked the manuscript for historical accuracy. The Coordinator of the project was Dr. Robert E. Browne of the State Department of Education.

■ CHAIRMAN AXELROD: Let me now introduce our final speaker. John Dobbin is the Field Service Project Director for Educational Testing Service. He has his degree from the University of Minnesota and has been engaged in work with the Educational Testing Service for some fifteen years as a project director. What I think may be the best thing to do is just to name some of the projects that he has been directly involved with. He has been involved with the statement *of Elementary School Objectives* and the *Goals of General Education in High School* that were first supported by the Russell Sage Foundation—the one on elementary schools having been published in 1953 and the one on the goals of general education in the high school having been published in 1956. Undoubtedly, many of you know these.

He has been directly involved with the *School and College Ability Tests* (SCAT); with the *Sequential Tests of Educational Progress* (STEP); he has worked on a half-hour motion picture called, *What is the Score?* in which a cast of teenagers attempt to explain to other students of junior high school age what their scores on tests of ability and achievements mean. This motion picture was produced at the University of Georgia in 1962.

Mr. Dobbin co-authored with Henry Chauncey a book that was published by Harper and Row in 1963. This is a book that many of you know, *Testing: Its Place in Education Today*. This is a small but potent book for parents and other interested citizens describing the nature and use of school tests. Mr. Dobbin has been involved, too, in an early and experimental document in a New York City project for improving the schools' understanding of culturally different children. This is a guide that is entitled, *Guide to Observation of Intellectual Development in Five and Six-Year-Olds* that was published in 1964. I will just mention one more.

During the summer of 1965, operating on funds provided by private sources, Educational Testing Service and the Institute for Educational Development conducted a survey study of Operation Head Start programs. The aim was to find good practices and to look for ideas, methods and materials that showed particular promise in the teaching of culturally deprived pre-schoolers. The report on this study has been made to the federal authorities and the shape of the 1966 Operation Head Start program will be affected by these recommendations. I am hoping that Mr. Dobbin will have something to say about them. I would like to present John Dobbin, who will speak on the topic, "A Retirement Plan for Working Assumptions."

A Retirement Plan for Working Assumptions

JOHN E. DOBBIN

There are certain assumptions used widely in education—such as the assumption that intelligence is primarily an inherited characteristic—that seriously impede needed change in the methods of the profession. Techniques need to be devised to retire out-dated working assumptions. None of the agencies already at work in the field is equipped to apply such a technique for unteaching, however, because the existing agencies are geared to keep the educational system running smoothly rather than to change it. Proposed in this paper, for the sake of promoting discussion, is a new kind of agency which will assemble the best current evidence on each topic of some professional urgency, disseminate that evidence among educators in translated form, then bring political force to bear on educators to use the new information—by sending the same information, in layman's language, to the citizens who really control education.

It is customary, in the company of scholars, to provide not only a history of one's problem since the Year One but also to sketch how the problem affects scholars in other fields—signifying that it is an old problem and nobody has done much about it.

This certainly is true of the assumptions we use in education.

To start at a proper beginning, though, it might be well at least to mention some of the popular observations of our time concerning the rate at which new ideas are generated, the explosion of knowledge, information theory, and data retrieval. If it is possible to work the phrase in without being obvious about it, one also gains points by quoting *cogito ergo sum* without giving the translation.

But visible through all the verbiage is the fact that there *is* a mountain of new knowledge about the mind of man that the schools don't use, reservoirs of fresh ideas that educators haven't heard about, rivers of emergent thought known only to the tribal medicine men and never applied to school learning. Few would deny that in our time research has returned more usable knowledge about man than was known in all previous generations, back to the first. Yet we teach our children by about the same methods, and achieve

about the same results, as our fathers and their fathers before them. Why is it that this abundance of new knowledge has not produced substantial changes in the way we teach our young? How is it possible for us to continue to treat as "fads" some basic notions about learning that were fully established half a century ago—while continuing to perpetrate with bland self-assurance some of the educational witchcraft picked up by our benighted ancestors in the seventeenth century?

After twenty-five years of circulating among schools, schoolmen, and researchers, I think I can discern one of the reasons for the lag of education behind its research—and *that* is what I am here to talk about. It has to do with the working assumptions on which our profession runs.

An example will help me here. Running all through our school methods and organization and curriculum and teacher training and public relations is an assumption that what we call "intelligence" (give it any name you like) is primarily an *inherited* characteristic—subject to modifications within limits, some say, but nevertheless a biologically inherited human attribute which can be underdeveloped in countless ways but which has a definite upper limit and remains fairly constant from childhood to senility. It may surprise even some good educators to be reminded that the assumption of inherited intelligence is an assumption rather than a "scientific fact." It has been a simple working assumption all along. When one tries to demonstrate inheritance of intellectual capabilities according to the laws of nature that govern inheritance of biological characteristics, the demonstration fails. However it is acquired, intelligence is not acquired that way.

An assumption that intelligence is inherited undoubtedly was both necessary and useful half a century ago; then as now people had schools to run and it is never possible to know everything about all aspects of a job before undertaking it. Many things have to be assumed in order to press ahead with the task, making them—for the duration of their use—working assumptions.

For reasons which should be interesting to the social anthropologists, though, people engaged in scholarly pursuits have a particular kind of trouble with working assumptions. The first person to use a new assumption often will label it as such, usually calling it by its more dignified name—"hypothesis"—but it is customary in our calling to drop the label after a very brief use. While the originator

of the assumption is fairly likely to keep remembering what it is and where it came from, other people fail to recognize it without its label—so that as the idea is quoted and borrowed and adapted and plagiarized and retreaded, the people who use it don't know that it was assumed in the first place and treat it as something that *is*. And, since scholars are more likely than other people to regard things they find in books as things that are, assumptions in education lose their identity at an early age and remain in the literature to the end of time, getting in everybody's way and generally making desirable change doubly difficult.

Need another example? About forty years ago someone perpetrated the assumption that children could not learn to read until they reached a "mental age" of six years and six months. So, since the average mental age of a large group of children was equal to their average chronological age, thousands of school systems organized instructional programs around the assumption that it is fruitless to start reading instruction with children until they have reached six and a half years. You and I probably started school in places where that assumption was operating; some of our children did also, and it is likely that some of *their* children will start off this way. The assumption got going in the first place because the methods used at that time for instruction in reading didn't work very well, on the average, with children younger than six and a half. The assumption was made about the learning characteristics of children when it should have been made about the instructional method. Researchers and reading specialists in the last twenty years have been improving instruction so that it *does* work with younger children, but the old assumption lives on to dominate primary education in thousands of schools. The clear fact that it is wrong—probably a serious handicap in the education of many children—has not yet reached and affected enough people to change educational practice substantially.

The simple assumption of inherited intelligence, too, lives on in the face of thirty years of real evidence that what the infant human being inherits biologically is a set of reflexes, out of which he *builds* his intelligence by means of encounters with his environment. If the observations of Piaget and Guilford and Bruner and Crutchfield and Deutsch and Hunt and Rosenzweig (to name only a few) have any implication at all for American educators, they contain a challenge for them to drop or drastically modify that assumption of "native intelligence" behind which they have concealed their failures for

all these years. But the old assumption won't die in the face of contrary evidence. People often hold to it with tenacity and vigor. How *does* the profession go about retiring the working assumptions that have outlived their usefulness and now get in the way of needed change?

Since I have expended several consecutive thoughts on this matter, I shall mention some of the possibilities that I have considered and passed by—any one of which you are welcome to resuscitate if you wish:

1. Could the teacher-training institutions retire the obsolete assumptions by placing great stress on their modern replacements? My opinion is that this possibility has several weaknesses—such as the difficulties these institutions have in reaching educators already in service—but the most serious flaw in the idea is that the teacher-training institutions on the whole are neither equipped nor experienced as instruments of radical change. Colleges of education are geared for the job of keeping the educational machine *running*—not for redesigning it.
2. Would it be possible to flood the professional journals with so much information about the new knowledge of man that educators will alter their assumptions? Some professional group that has direct access to the best recent work in genetics and the psychology of learning could provide material for the journals read by the superintendents and school board members, for example. Leaving aside all conjecture about the forces for change that the professional journals can or cannot bring to bear upon the policy-makers in our educational system, it is possible to generalize with some confidence that the professional journals are not the instruments of general educational change, either. These journals are the means by which the specialists in our ranks talk to each other; their content is the message of one specialist for other specialists of the same kind.
3. Would it be possible to engage some of the country's outstanding researchers—the dozen or so who are exploring the real frontiers of the mind—to conduct conferences for administrators and school board members and journalists and influential laymen, giving them the best and most up-to-date information relevant to the shaping of assumptions about the learning process? This has been done a few times—and not wholly

> without success, because every sharing of knowledge by researchers benefits the profession—but because they *are* researchers these people often don't communicate well with the practitioners in the field. Because they are professionally precise in statement of their observations and conclusions, they develop occupational characteristics that get in the way of their communication with non-researchers: (a) for the sake of precision they use a specialized nomenclature that is understood only by other researchers and doesn't translate to English very well, and (b) also for the sake of precision—as well as to avoid the need for endless defenses in the professional journals—they beat a generalization to death with qualifications before anyone has a chance to see what it looks like in full flesh.

It is more than slightly possible that I have overlooked some real potency in one or more of the three techniques—potency for precipitating educational change, that is—though I have not mentioned them purely for the sake of damning them. It is possible also that there are still other great instruments for change that I have not mentioned at all. Since it is my purpose only to sketch some examples that may provoke your active participation in the discussion, it is not necessary for me to attempt a complete list. Rather, let me hasten to describe an instrument for achieving change in education which does not yet exist—but that needs (I think) to be invented.

I have spent most of my professional life pointedly ignoring the fact that the American system of public education is a *political* institution. Most of my acquaintances in the field have done the same thing. Some of us even have taken time to deplore the occasional evidences of politics in education that now and then enliven our newspapers—or to view with alarm the position of anyone who is perceptive enough to see education as a political enterprise and realistic enough to act accordingly. On the whole, it seems to me, educators and all other scholars related to education have tried to pretend that education is political only when "politicians" try to influence the system—and pure and professional and somehow more American when it can be kept "out of politics."

Nothing can be less realistic than this point of view. Our society is political to its roots. Our way of life came into being by political action, has been sustained by political action, and with a few excep-

tions has been defended by political action. Nearly two hundred years of unbroken continuity in an elected government is a world's record; we Americans hold that record because we possess and respect political skills.

You may sense now the direction of my final argument. Having described a kind of change that I think education needs very badly (official retirement of clearly obsolete assumptions), and having concluded to my own satisfaction that none of the existing instrumentalities of the professional community is appropriate for the job to be done, I reach the point at which my only recourse is to suggest that some *political* action should be designed to hasten needed changes in the institution of education.

I am happy to report that this kind of political action need not involve conventions and noise-makers and delegates wearing funny hats. Rather, it will involve assessment of the control of education and then a realistic campaign to reach the controlling people with information that will help to facilitate change.

In my own ranking of the people who control American education, I place the local boards of education at the top of the list, in a class by themselves. American public education from kindergarten through the community college is controlled locally by direct representatives of the people. And school boards have always been the targets of political action by those who seek change (or seek to prevent change) in our educational system—except in the case of changes sought by professional educators.

Next to the school boards in the importance of their influence on educational change I would rank state legislators and college professors outside the field of education; the legislators because they control the ever-larger sums of state and federal money that pour into education, the college professors because they are so often invited into critical advisory functions.

The fourth group I would include among the prime controllers of education are the journalists, particularly the publishers and editors and feature writers of daily newspapers. School board members and state legislators listen closely to all expressions of public opinion, and newspaper statements not only influence public opinion but sometimes *are* public opinion.

It seems to me that all four of these controlling groups operate with a pitiable lack of factual, modern information about teaching and learning. It is commonplace for school board members to be-

come truly expert on budget control or bus maintenance or building costs—and at the same time to remain totally ignorant about the human learning process. Legislators who pride themselves on wanting "nothing but the best" for their constituents can be heard daily emitting opinions about education that are as up-to-date as "Tippecanoe and Tyler too." We all know how easy it is to trap a college professor into thinking that since he is a recognized expert on European history—or sociology or biochemistry or plant ecology or mathematics—he is also, without further study, an expert in education. The journalists appear to have some misapprehensions about education that are peculiarly their own, but my acquaintance among them is so limited that I can't even guess where those misapprehensions come from. I *do* know that the gaps and shortcomings in knowledge that all these policy-shaping people have about education could be repaired far more easily than now is possible if only a few of the ancient, no-longer-working assumptions could be moved out of the way. Imagine the quickening of progress in programs for early learning and special education, for example, if the first public reaction were not always: "But you are never going to change their innate intelligence, are you?"

As to the realistic campaign to retire obsolete assumptions among the policy-shapers—Although I look forward to a great deal of constructive help on this notion during the discussion session, I'll phrase the idea as a positive suggestion. It involves a sequence of three actions by an independent agency.

The agency I am thinking of for this function may have to be more truly independent than most that now exist, but it seems to me that one of the large foundations, some of the existing centers for research in learning, and some of the new centers for study of innovation in education are qualified initially for the project I have in mind. The Carnegie Corporation supported the work of Dr. Conant for a number of years while he was functioning almost as a one-man agency for promoting change in the organization and administration of education. There is so much to be done that several agencies could go to work at once without serious risk of overlap—but during this discussion it will be convenient to pool them in a single collective term and call them "the agency."

The three sequential actions I would propose for the agency are these:

1. Conduct a world-wide symposium on a topic that is near the

center of education ("The nature and growth of human intellect" might be a good one for a starter—or "How learning occurs in children from eight to twelve years") in which discussion is focused on the import of recent knowledge for the assumptions used in education. Superintendents and school board members and principals and school architects and supervisors and teachers in classrooms—all need to do their work on the basis of a few general assumptions about the way in which the human mind works. What, in the light of best modern knowledge, should those assumptions be? The people who should give their attention to specification of assumptions are, naturally, those whose scientific work affects assumptions—the researchers. I would not ask them to translate their recommendations into language suitable for communication to non-researchers, but simply to draw up major generalizations upon which they can agree among themselves. If the researchers were to object that consensus among them is not possible, I would have them reminded of the erroneous generalizations that will linger if they fail to generalize from their knowledge.

2. Translate the generalizations of the researchers into the idiom of teaching, specify the assumptions which the newly-stated generalizations should replace (that is, list carefully the assumptions which should be retired), and spread the word to the profession by all possible means. This is an interpreting-editing-publishing function which can be done best by specialists in that line of work, hired for the purpose, and should not be attempted by the researchers or by the educators. The "all possible means" for reaching members of the profession with the fresh assumptions probably should include the relevant professional journals, but also should utilize direct-mail newsletters, conferences, and publications in the professional book market.

The first two steps in the recommended action program may be a little different from those to which the profession is accustomed, but they are strictly professional. The third step is political.

3. Two years after the professional audience has been "saturated" with the translated generalizations of research information on a topic, a final round of translation in *layman's language* should be addressed to legislators, college teachers, and journalists. Because each of these groups is a special and large audience,

each deserves special attention in the development of materials. To the journalists might be said, for example: "The enclosed article describes how most six-year-olds acquire the skills of abstract thinking, according to the best of modern research, and summarizes what we have been relaying to all educators for two years. This recent knowledge specifically replaces Theory X and Hypothesis Y, which now appear to have outlived their usefulness. If you want more detailed information for a feature article, or if you want to pass it along to your school board, let us know and we'll send you as many copies as you need of the full-length treatment, Booklet 10. Are the elementary schools in your community operating as if the teachers and principals had already put this knowledge to work?"

I need not spell out the technique further. The idea back of the third step is no more (and no less) than the political tactic of telling the educator's constituents and critics what can be expected of him in professional know-how. With a tattle-tale agency at work in this way, the educator who *does* keep up with his field will quite properly look good—and the educator who continues to rely on his set of 1923 assumptions will become as visible as the driver of a Hupmobile on the freeway. Both outcomes are to be desired.

There you have a sketch of the problem and one proposal for a course of action to solve it. You are invited to express your own ideas on this topic in one or more of the following ways:

1. Deny that the problem exists in an important degree;
2. Agree that the problem exists, but state it in a different context or aim the discussion at different objectives;
3. Agree with the statement of the general problem, but suggest certain educational assumptions more in need of retirement than those mentioned by me;
4. Recommend a different set of techniques for retiring obsolete assumptions;
5. Agree with the speaker all the way and find your way to the "Amen!" corner.

To reduce the likelihood that there will be any unprovoked fence-sitters remaining in the group, I shall conclude with a small extension of my list of working assumptions in education that have earned

an early retirement. The old assumption of inherited intellect is my favorite villain, but the following also fit descriptions on the Post Office wall:

a) Assumption that telling a child and teaching him are the same thing. (Some better phrase-maker than I has said: "To say that you have taught when no one has learned is like saying you have sold when no one has bought.")
b) Assumption that a grade earned by a student in a school subject or course has a meaning that is understood with reasonable exactness by more than one person.
c) Assumption that "school" must be composed of groups of students gathered in the rooms of a public building built for the purpose.
d) Assumption that "readiness" for school learning is an aspect of maturation that is just waited for, like puberty.
e) Assumption that all teaching in the public schools is done best only by fully trained and certificated professional teachers.
f) Assumption that academic learning is an intellectual process, achieved in an intellectual setting by intellectual means.

That's enough for now. Call me out, if you wish.

Conference List · 1966

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Lloyd H. Ahlem, *Stanislaus State College*, Turlock, California
Deryle K. Allen, *Fresno State College*, Fresno, California
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Wayne Boone, *San Rafael High School*, San Rafael, California
Edward W. Bowes, *University of California*, Berkeley, California
Richard Boyd, *Riverside Unified School District*, Riverside, California
Donald Boysen, *Saratoga High School*, Saratoga, California
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Ray E. Brewer, *Fresno State College*, Fresno, California
Edward S. Brignall, *Roosevelt Junior High School*, Oakland, California
David J. Brinks, *University of Oregon*, Eugene, Oregon
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Joe L. Byers, *University of California*, Berkeley, California
Robert G. Cameron, *College Entrance Examination Board*, Palo Alto, California
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Bonnie Caudillo, *Sutter County Schools Office*, Yuba City, California
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Joan Chambers, *Hayward Unified School District*, Hayward, California
Newton K. Chase, *State Board of Education*, Sacramento, California
Edwin C. Clark, *Burbank Unified School District*, Burbank, California
James V. Clark, *University of California*, Berkeley, California
Christine M. Coffey, *Katherine Delmar Burke School*, San Francisco, California
Joseph Conway, *Oceana High School*, Pacifica, California

Chester Cooley, *Napa Valley Unified School District*, Napa, California
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James H. Crandall, *Alameda County Schools*, Hayward, California
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